

SO_3170 US

<110> Bunch, Roderick T.
Morris, Dale L.
Curtiss, Sandra W.
Rodi, Charles P.

<120> BIOMARKERS AND ASSAYS FOR CARCINOGENESIS

<130> 3170/00/PCT

<140> US/09/490,609
<141> 2000-01-25

<150> US 60/118 078

<151> 1999-01-29

<160> 580

<210> 1
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<212> DNA
<213> Rattus norvegicus

<400> 1

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gaaacaaaaaa tattttgtta atcatcaaattt ttatacttagc tatctgggtg ttagcatatc 180
tagtaattat gagtctagaa taattttac atattttat attattgtcc tctcagttac 240
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<210> 2
<211> 206
<212> DNA
<213> Rattus norvegicus

<400> 2

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gactgtggtt ttctggacgt gttgtgtctg ttagtgtctt tttgactttt gtttcgtgtt 180
tgaatttgaa ctgacgactg tgttta 206

<210> 3
<211> 74
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 3

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cctgttttg ttta 74

<210> 4

<211> 207

<212> DNA

<213> Rattus norvegicus

<400> 4

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tattgggtg tgtggccaaa tcatcccttg gaattttcca ctgcttatgt tcatttgaa 120

gatagccctg ccctcagctg tggAACACA gtggtcgtca agccAGCAGA gcaaactcct 180

ctcactgctc ttcacatggc atctta 207

<210> 5

<211> 147

<212> DNA

<213> Rattus norvegicus

<400> 5

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tcactaccgc tctgaagatt tattagacgt tgacactgct gccggaggat tcagcagaga 120

cagggactga actactgtct cccttta 147

<210> 6

<211> 366

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 6

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aagaacacta ttcttgtcaa atggctaccc caaaacgatc tgctggta tccaaaggct 180

cgggcgttca tcacacactc ccgggtcccc tggtatattt gaaggaatat gcaatgggt 240

SO_3170 US

tcccaatgg t gatgatgcc ttgttggg atcagatgga caacgccaag cgcatggaaa 300
ctcggggagc t ggggtgacc ctgaatgtcc tgaaaatgac tgccgatgat ttggaaaacg 360
ccctta 366

<210> 7
<211> 156
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 7

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cgcaaagcat gagggctggg agaggaccnn ggtgtttgcc tggccagtgt gaagcagtca 120
caaggaggtg actggacaaa ctagcatgtg gcctta 156

<210> 8
<211> 103
<212> DNA
<213> Rattus norvegicus

<400> 8
gatccaggca agttgggaga atatgacgct agtatacataa acagggtgcc aggaaaatcc 60
actattacca aacattccaa tgactcctat agctgttgcc tta 103

<210> 9
<211> 127
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 9

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gggattta 127

<210> 10
<211> 400
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
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tacttctgca aaaccaaactg tgtgcgtttt gaaggagaga ctccagatga aacagttatc 180
acttctcacc actatgtcaa acagagtctg ctcacaatat gctgcatatg gaaaggaaaa 240
atcaaggatg agccatctca taaaacttagc ccaaaaagta ccaactgcta acctggagga 300
tgttctgcca ctcgctgaag accttactga aatcctgtcc agatgttga agtctaccc 360
agaagactgc atggccagag agctgcctga acacacattha 400

<210> 11
<211> 57
<212> DNA
<213> Rattus norvegicus

<400> 11

gatccagaaa cttctgctaa gacttcttca atggaaaaga gctgaataag agcatta 57

<210> 12
<211> 231
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 12

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tgctccagtgc ggattgcaca agaatgtctg tgcagaagca aagacagcct ttttaccagt 180
gtggccaaag cttcacaca tacgggtacc tgtttacac tgtgatgttt a 231

<210> 13
<211> 295
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 13

SO_3170 US

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ctaaataggc caccaagtga cagcaaaatg gtgccaaagn tctactacag cactgctaag 180
aaccgacagc tgagaagccg gatagtttct gaccttaggt gcacacacct aagtccctcaa 240
ctggacccttg alayccaaca aatgggagca gtgtcttgca tcttagcac ctta 295

<210> 14
<211> 188
<212> DNA
<213> Rattus norvegicus

<400> 14

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ctgtacgatt gcctgaagga gaagcactgc agtgtttgac agagcgtgct atgagttggc 120
aagatagagc acgacaagct ttagccacag atgaaactgtc ttctgccctg gccaaactct 180
ctgtgtta 188

<210> 15
<211> 194
<212> DNA
<213> Rattus norvegicus

<400> 15

gatccccttt cccagtgata cccagattt atttgattgc ccgttttgtt ccatgttgtt 60
ataggttggaa atggtgagca atatcagaga accatgtttt ctctcaggac actttctgtg 120
ctggggtagc acaggctgtc atgctcagca taggtgctcg ctctgctaca ctgtccttc 180
aaagtctgtgg ctta 194

<210> 16
<211> 164
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 16

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gtttggctgg atcattccaa cgatgatggg aaatctactc tctgaaggca gaatgaatga 120

SO_3170 US

gaaaatggcc agttttct tgaagagggt cagccctaac ctta 164

<210> 17
<211> 43
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 17

gatccctgag atgccctaga tcaatgnat gactatgaca tta 43

<210> 18
<211> 426
<212> DNA
<213> Rattus norvegicus

<400> 18

gatccgtggc ccatgagaac acatccaatg ctgagacctg tggaggagtc agcaactggg 60

attgaaagga toagcagggtagaccacat ggagctgttag ctggccacag ctaagactca 120

gaagaccata ggcctgacac aggatgtcag tcaatgtcac agaatggatt tgaacactct 180

gtagtggact gtgtacggct aaacacaggg actcttctac aaccaggaa tgctggagct 240

gttctctgtg aaggccacac ccctgagtgt ccagtccttc cctggctcc tcataatgaga 300

gctaggcatt gtctgatgtg gtgaccctgc agggacagcc ctttgttctt gacagccaca 360

gccttcagtg agcctggatt tcctgtgtgc ttcccttagga agttctccct ggatgactgc 420

tggtta 426

<210> 19
<211> 212
<212> DNA
<213> Rattus norvegicus

<400> 19

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cagtaagaac acggccagca tticagagtt gctggacggt ggctctcacc ctgggagttct 120

gctaagtgtat ttcgactact gggattatgt cgtccccgag cccaacctca acgaggtgg 180

gtttgaagag acaacatgcc agaatttggta 212

SO_3170 US

<210> 20
<211> 215
<212> DNA
<213> Rattus norvegicus

<400> 20

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agaaaaaaaggc ggccggctgat cttctaggct gcaaacgggt gtctctggcc atccctggat 120
actggctgga gaggagacag cgtcttcaca gttgtacttg tagccttcac aggtcaggct 180
gcgtctgccc actcctgtcc attgtacgtg cgtta 215

<210> 21
<211> 286
<212> DNA
<213> Rattus norvegicus

<400> 21

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gccctggagt agggcccagg atgcaggtgc taatgtctat ccccgccgt cttttcccc 180
actctaccat gggatgtaac tccaggaccc ctgccatctc cggtaccaaa agactgtggc 240
ttccgtgtct actcagaaat cagttctact tcgtaaacag tgttta 286

<210> 22
<211> 227
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 22

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atgctgtgat ctctgaaggg acaactctaa aatcaaagtg ctggaagggtt ggctccatcc 120
tgagntnctc ttccgcattgc aagtgttgtg tttgtcctgt gccttatgct cttctctcat 180
acctgcaaag gatgcattgt tacttgcttc tcaactcctc ctgttta 227

<210> 23
<211> 51

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 23

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<210> 24
<211> 83
<212> DNA
<213> Rattus norvegicus

<400> 24

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tctagaagac agtcagtgcc tta 83

<210> 25
<211> 322
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 25

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gcaactgcat tcatgggcta tgtactccca tgaggacaaa tatcattctg aggagctaca 120
gtaattacaa acctattatc agctatccct tacattggga ctaccctagt cgaatgaatc 180
tgaggaggct tctcagtaga caaagcaacc ctaacacgct tcttcgcatt ccacttcatc 240
ctcccattca ttatcgccgc ccttgcaatt gtacatcttc ttttcctcca cgaaacagga 300
tcaaataacc ccacanggat ta 322

<210> 26
<211> 178
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 26

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tcagttcct gcaaagccgt tgagagagtc acagaccacc tccttacgga tctcagaccc 120

SO_3170 US

ggacagagaa cagttcaaac tcngggagat gcaaagccgg tatgagcaac ctgcatta 178

<210> 27
<211> 275
<212> DNA
<213> Rattus norvegicus

<400> 27

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ctcattcttt ctctcacct tggcacctc cacccacctt ctgctgtgct tctggctcc 180

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gcccttacacct gacttcatgt ttgaccttga cctta 275

<210> 28
<211> 69
<212> DNA
<213> Rattus norvegicus

<400> 28

gatctcaatt tgatgtcatt ctgcagatg ctgtgggtcc ctgtggtgag ctgcttagcta 60

gaatgctta 69

<210> 29
<211> 48
<212> DNA
<213> Rattus norvegicus

<400> 29

gatctctcta tagaccagaa acatgatatg tggaccatgc tggcctta 48

<210> 30
<211> 308
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations

<400> 30

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ccttcccact gtgcattaca acatgggcgg gnntcccact aactacaagg gacaggtgct 120

SO_3170 US

gaagcacgtg aacggccagg atcagattgt gcctggtctg tacgcctgtg gggaggctgc 180
ctgcgcctca gtgcattggtg ccaaccggct tggagcaaac tctctttgg accttgcgt 240
ctttggccga gcctgtgccc tgagcattgc agaatcttgc aggccctggag ataaagttcc 300
tccgattta 308

<210> 31
<211> 221
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 31

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ctgctgttgc cactcagctc tcctatatgt ttttccactg gagttatgag ctgcctgtcc 120
ttctgtcctg tggatttcaa aacaaacttt ctttcgtcag tgtgcacttg gggcggttc 180
ttggnnntant gaggagacag cctgtcagcc tctgcccatt a 221

<210> 32
<211> 186
<212> DNA
<213> Rattus norvegicus

<400> 32

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aactctgcct acagggtgct tgcttattga tagtgaatta tcatttcttgc tggtgtctc 120
atccatgtct ataactttct tagaacatca tgaaatgggtt actttactac atgatttata 180
acattta 186

<210> 33
<211> 146
<212> DNA
<213> Rattus norvegicus

<400> 33

gatctcatcc tcccgaaagg gttgcttaggc ttctgtgtgg aaactgtggc gtcagcagcc 60
agagcacatg ctccctggccc agggctctca ggctcactct cacctcatgt attttgc 120
tgctcgtagg aaaatcatcg tcattta 146

SO_3170 US

<210> 34
<211> 125
<212> DNA
<213> Rattus norvegicus

<400> 34

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agttttgtat gccctggtca gtcttgtaat ggaacttgca gtacactgcc tctccattcg 120
catta 125

<210> 35
<211> 49
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 35

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<210> 36
<211> 193
<212> DNA
<213> Rattus norvegicus

<400> 36

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ttcattggcc acggaacgac tacaaatagt ggcgagatgc tgccctctgg tggccccaaa 120
cgttgaactc gggtgtatag gtggattgtat tacaacagtc aactcccagg gtctgacttt 180
ctaattccgcg tta 193

<210> 37
<211> 205
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 37

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agggacaata tcattgaccc aaccaagact gatcgctgtc tccaggcccc aggttgaaga 120

SO_3170 US

aaggcctgag cctccagatt gcaggcaag atccagttag agcaagantg cttctctgtc 180
cagaagtcaa tccaagaagt gctta 205

<210> 38
<211> 177
<212> DNA
<213> Rattus norvegicus

<400> 38

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tagggacaat atcattgacc taaccaagac tgatcgctgt ctccaggccc gaggttgaag 120
aaaggcctga gcctccagag tgcctctctg tccagaagtc aatccaagaa gtgctta 177

<210> 39
<211> 157
<212> DNA
<213> Rattus norvegicus

<400> 39

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cagagttctg ggagagggaaa gtcffffcag gcctattcct ctcccaatta ttggcaatat 120
cttcagcta aatgtgaaga acatcaccca atcctta 157

<210> 40
<211> 413
<212> DNA
<213> Rattus norvegicus

<400> 40

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aggcttcatc tggccctgtta agaactatga tggtgatgtg cagtcagact cagtagccca 120
agtttatggc tcccttggca tgatgaccag tgtgctgatt tgtccagatg gtaagacggt 180
agaagcagag gotgccatg gcactgtcac acgtcaactac cgcatgtacc agaaaggaca 240
ggagacgtcc accaatcccc ttgcttccat tttgcctgg tcccgagggt tagcccacag 300
agcaaagctt gacaacaata ctgagctcag cttctttgca aatgcttgg aagaagtctg 360
cattgagacc attgaggctg gctttatgac taaggacttg gctgcttgca tta 413

SO_3170 US

<210> 41
<211> 346
<212> DNA
<213> Rattus norvegicus

<400> 41

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ccaacaactg gttcataaaag gcagatgcag ggtacttcac acacactggg ctggcagct 180
gggactgcca gggagaggtc ctttagcatac atgaaagtgg acagggacag ctctgggtt 240
taggcagggaa tagacaaaagg tgacaaggct cacgacctca gggacaggag tccctgtgag 300
ggccctgcctt acctcctgtt tctccctct cccctgtcag ccatta 346

<210> 42
<211> 292
<212> DNA
<213> Rattus norvegicus

<400> 42

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cgaggaaat ggtatcaagc tcattatggg gtttctgcct tcggaaagcc taaaggaata 120
tctgccaaag aataagaaca aaatcaacct caaacagcag ctaaaatatg ccatccagat 180
ttgttaagggg atggactatc tgggtctcg gcaatatgtt caccggact tagcagcaag 240
aatgtcattt gttgagagtg aacaccaagt gaagatcgaa gactttggtt ta 292

<210> 43
<211> 239
<212> DNA
<213> Rattus norvegicus

<400> 43

gatcccatttgc caggagagg gaggtacgtt ttgctacgaa acaagccatc cccagactca 60
acagctaacc aagtattcac gtacccgtga ttctgtgggt tagctaagct cctttgagca 120
gctctactag ttgtggctgg tcctgctcat gagcccagtc acttctcaact tcagctgggg 180
ctggtaggc tgggttcacc cagccattgtt agcaagtgtt gggtgcacgt gcttgggtta 239

SO_3170 US

<210> 44
<211> 121
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 44

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cttttgcgc cgttcttcct tcacttggca gaagaagtgt gccagcacat cccctacgtt 120
a 121

<210> 45
<211> 117
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 45

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caggccagtg ccattattta ggcttgcagt ggccggattt cttcaagcag tggatta 117

<210> 46
<211> 105
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 46

gatccagttc caggatgtgt gtccttgcacc cttctctttt gcctgctggc actgacnagt 60
gcccatgaca agccttcctt tcaccactgt cggacgacat gatta 105

<210> 47
<211> 52
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 47

gatcctatgt gtctcnaaga ataagcacac tcagactaac acagtcccat ta 52

SO_3170 US

<210> 48
<211> 442
<212> DNA
<213> Rattus norvegicus

<400> 48

gatctcgaga cggatagcc tattcagacg accatccaa aggagtttc ccagtgcacg 60
gtcatcacca tcgctcacag gctgcacacc atcatggaca gtgacaagat aatggtccta 120
gacaacggga agattgtcga gtatggcagt cctgaagaac tgctgtccaa cagaggttcc 180
ttcttatctga tggccaaggaa agccggcatt gaaaatgtga atcacacaga agctctagca 240
gctggttccg tggctggcgg gactataaga acagtttcta ttatttgctt tgggtttctg 300
tgactgtgct ctaggtgcaa agacacatat tttgttcccg ttgctcaggc tgggcctcaa 360
actctaaggt ccagcaatct ctggtctcag ccagagacct gtaaaaatag acacttcaaa 420
Gattatcatg aataaatatt ta 442

<210> 49
<211> 227
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 49

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gagtgtggcc cgccgggtcc tccaagccct ggangggctg aaaatggtgg aaaaggacca 120
agatggggcc gcaagctaac acctcaggaa cagagagatc tggacaggat cggcggacag 180
gtggcatgct gccaacaaga agcattagaa caaaggatgc tgggtta 227

<210> 50
<211> 248
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 50

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acggacacaa gaggaatatc ccctggaagt gaaccaagtg gaaagaatga gctgtgagac 120
tggatagtta tggtgccctca agctgatcct tctgagtggg cggggctagc accccagtgt 180

SO_3170 US

ccatcaagca aggtctatcc ttctgagtgg gcaggctagc actccagtgt ccagnnattc 240
cagtctta 248

<210> 51
<211> 113
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 51

gatccaacctt nnncagnnaan tgggagctan cttatctggaa tccacagctt gatgattttnt 60
acatcgaaaa gtactttggg aggntgttgg agtatttnnt gattcaagcc tta 113

<210> 52
<211> 198
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 52

gatccctaca agaggnagac aanacttcaa catagtgtgt gagctattct ctgcggcc 60
atcatataccta gtagtttgag ccctctaccc tggaaaatcc agatggatga agaaaagata 120
gctaacagct accagagggt gcatttggat gaaggaataa catctaatgt tntacaggat 180
aacnnntaact gacaatta 198

<210> 53
<211> 166
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 53

gatcccacatcg ctcangcngc anntcaggtg cantcctggaa gagagatccc aaaattcttc 60
aggcaacacc tccttcagtc tggagnnaac tctaaatagt gtgaccatgt aggacagagt 120
aaagggcagg gagtgaatta gagaagagtt ggnngtctgg ggatta 166

<210> 54
<211> 190
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<223> unsure at all n locations
<400> 54

gatccgagga catnctnctg gattcacaac tcttcaacct caggacggcg acgtcgctca 60
atggggattg gttttcgat tgtcgtggcc tctgacaaaa gagaaaagat agaagagaac 120
ggcagcatga gagttttgt gcagcacatc gatgtcttgg agaattcctt aggctncnag 180
ttccgtatta 190

<210> 55
<211> 178
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 55

gatcctagtt cagggnnnggc tgnaggtaaa agctgttcta cagtcaactt cttcctaata 60
cagtgcgtg acgtnacttc taatagacga naattagana cagcctgctt gcccataaca 120
ggaaagtgtat cactgagatg atagcgtgtc catttgatgg gccnccttag caacgtta 178

<210> 56
<211> 240
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 56

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gctcaacaac tacagaacgc acctcccggt ctctctgctc taagatgcta aatatgaaag 120
ccagngttc acagcccaga tcatccacng cactgcttta ctgattcggg agtttcttt 180
gaggatactc cagatacaccc tgagacatta tanatcatat atcaannngc acaaataatta 240

<210> 57
<211> 222
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 57

SO_3170 US

gatctacagg angancaagc ttngtntang tattgatgag gatgatccta ctgtggatga 60
taccagtgct gctgtaactg aagaaatgcc acccctggaa ggagatgatg acacatcacg 120
catggaagaa gtagactagg cttcaccagn actatgttt tgatgcttac cttcattcct 180
tctgatnata tattttccat gatttngnt ttatTTTGT ta 222

<210> 58
<211> 112
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 58

gatctagaaa gcacnnncag tttctggant tatagcacaa atccacttgt attatcttt 60
tcatatnaca atttatgnnc cttgtgtca ttgtgnnccc attcctgagt ta 112

<210> 59
<211> 176
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 59

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gaagaaagct agnacaaatg cagaagaaag atgtctgatc tgcccttcat gttngagtt 120
tgtgagtgtg tgcattgangc ctctgttcag atcntgtgct nnngtttagc cattta 176

<210> 60
<211> 91
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 60

gatctcagnt tccgcctgtc tgtggaaaag gcaaaaaggc ccggtaatgg ctaccattgg 60
ggtgacacgg ggcttggnnn acacaacctt a 91

<210> 61
<211> 332
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 61

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aacactctat cacatcacan tgtggacatt cctcattgcc ctggacact tcntctcgga 120
gttgtttgta ttgggnacag cggctccac agttggtggtg ctggcacccct tgatggtagc 180
aagtttctca atcctgggta tgctagttgg gctccggta ctanaaggcag aaccagtatc 240
cagacagaag naaagaaatt gaggccancc ttgnncagctc tgatacatca tggtnntcca 300
cctttgctct nttnncac tctctgtcct ta 332

<210> 62
<211> 274
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 62

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acaatatcat tggatctaacc aagactgatc gctgtctcca ggcccgagga tgaagaaagg 120
cctgagccctc cagtggnnnn nnnnnnnnnn nncaccagga ctctagcatc accatttcct 180
gtccatggag catcctgaga caaattctgc gatctgatgt ccattctctg tcacagaaaa 240
gtgcaatcct gtctctccag ctctcccta atta 274

<210> 63
<211> 70
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 63

gatcttcaat tacnnnngtgn atgctactca accctgaata nanttcatag acagnccagt 60
tatctgctta 70

<210> 64
<211> 280
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 64

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ggccacttac tataggtnat aaggtcaactg tgncccttag caggnccaag cactgcatgt 120
agggaaaggaa gggtccagga gctgtccaga gcccattta gctctccttc tgtttaggaa 180
ataaaagacag agtgtgcaaa gagaggcagt cagcaactccc tcntgcttag ggaaccctgg 240
acagctgtgg acaggcatgg ggtannncta ctcttcattta 280

<210> 65
<211> 202
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 65

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agacagacag gccatcagtg tgaaatgtcc gagaaggcga ttgaaaagtt tatcagacag 120
ctactcgaaa agaatgactc aaagggacca ccccagtacc ctctccttat agccatgtat 180
aagtcnnctn actctggat ta 202

<210> 66
<211> 162
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 66

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ggccaatgac accacgttng gactagcagc tggggtcttt accaggacat tcagaggcgc 120
acaggtggcg gctgagctnc aggccgcnaa cgtgctacat ta 162

<210> 67
<211> 57
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 67

SO_3170 US

gatcttata gacatgaatg cacaactcat tgaatggcaa gaannttcgttcatta 57

<210> 68
<211> 131
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 68

gatcttgca aacnnccaaa ttctctctac cagagagtat ataattactt gagtttcttc 60

ttagttaaan agagaatgtc ttagtgtggt tgtgagtgtac agtgaattc aatgnncnnta 120
aaaggacatt a 131

<210> 69
<211> 77
<212> DNA
<213> Rattus norvegicus

<400> 69

gatccacttc taatctggat gctgagctgg gaagacacac cccttatca ggtcttgagt 60
gagaagacac ctgttta 77

<210> 70
<211> 353
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 70

gatccccctg tctccgcctc ctcgtgctgg gataaagctg tgcgtccagc ccccagctag 60
acactttgga actgggtggtg tagccctcag tatcatctt aacaccagtt ggggctcctg 120
cagtgcctt tgtgcttcac tgggtttgg acgaaggagt gaggccctg cttcctgtca 180
tgttagtgact gttagtgtgtc gcgtgactat ctcggtaag tcccgtaag aagatgaaag 240
tccacagcaa aaggcangtt cgattccag tgcctgctca cagctgcctg tatcttgatc 300
tgcaggggac cctgtgcctc tggttctgt gyatacaaat gtgtatgccc tta 353

<210> 71
<211> 187
<212> DNA

SO_3170 US

<213> Rattus norvegicus
<400> 71
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gctcttaat caccacgacc atcacatgtt attctgcctt atgccttgac ttcggtcatt 120
tccccctgaga ttcatactgtt gattcccgct gtattccttag cccttgcatt ttcctgacat 180
gccttta 187

<210> 72
<211> 116
<212> DNA
<213> Rattus norvegicus

<400> 72
gatccgagcc tcttgcgt actgtgacac agaacagata tcaccagact ggagcccatc 60
atctgagccc caatgctctc tacacaccag aattctatct ttttagcagtg acttta 116

<210> 73
<211> 147
<212> DNA
<213> Rattus norvegicus

<400> 73
gatccggtat ctattgtcct cataacacct ggctcccaag acttgattgt gaatgactag 60
gttatttagca gaatgaagga tggcctcaaa cgaagaaaga tgcatcaccc tcgaggctct 120
tcagaatgct ggatagagggc ttactta 147

<210> 74
<211> 195
<212> DNA
<213> Rattus norvegicus

<400> 74
gatcctgggt gaccctccct gaagcagtga gcaccacagg ttctgctgtg gaccagagcc 60
cccctgtgga gagggagaaa gaaaggggag ccgctgacct gcagggatac agaccttccc 120
cacagcctgg cagccgccccg tttgttgcag cttattatca gactgtggc tatcatagtt 180
catgctcggtt tctta 195

SO_3170 US

<210> 75
<211> 100
<212> DNA
<213> Rattus norvegicus

<400> 75

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ttgaacaact tatttcctt gtatcgatag agggtgctta 100

<210> 76
<211> 395
<212> DNA
<213> Rattus norvegicus

<400> 76

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ctgcctggc tgtctcatcc tgtcttctga gagcgtggtt cacagacctt gtgtctgagt 120
gaagggaacc caggttcaga ttccgttct ctgcttctgt cttttctca gcagcagggt 180
aggaacaggc cttttgtca catacaacag atgaagcca tggatgactt gtggaaaca 240
ccaacactca tgcaccctgt gggtgaccct ccctacacag cgccagcagc agagagcccg 300
ggaggtgctg caggcttcac tgagcttcc ttgccccagac tggcaaccga ctggctctc 360
ttttgaaaga ctctagctaa agtcagcggtt gttta 395

<210> 77
<211> 56
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 77

gatctacagg atgatcaagg ttggcttagg taaattgcag gntacgtgtt cattta 56

<210> 78
<211> 164
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 78

SO_3170 US

gatctaccaa gcccattacc acgggtccn natggtggc attccatgt ttggatca 60
gccttacaac atcgctcaca tggaggccaa gggagcagcc gtgaaagtgc ccatcaacac 120
gatgaccaggc gcagattgc tcagtcctt gagagcggc atta 164

<210> 79
<211> 207
<212> DNA
<213> Rattus norvegicus

<400> 79

gatctccacc gaactggta agagcaagct cagggagacc actggggcag cctgcaaata 60
tggggcctt gggctgccca ccactgtgc ccacgtggat ggtaaaacct acatgttatt 120
tgggtctgac cgcatggagt tgctagctta cctgcttagga gagaagtggta tggccctgt 180
cccccaacc ctgaatgcca gacttta 207

<210> 80
<211> 112
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 80

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atgacacatc ccgggagttg ccacactagc aagagcctgg ctgnntcctt ta 112

<210> 81
<211> 183
<212> DNA
<213> Rattus norvegicus

<400> 81

gatctccaaa ggccagaatt tccacagaca atctttcac aactgtttgg aaggcattta 60
gcacaattcc tgtgtgagtt ggaatgtatgt atttgcttac caaagctcaa gatcatccac 120
aggacaacca cagagtccac atcaaaggag agaggtggc tttgttgate cagactggcc 180
tta 183

<210> 82
<211> 118

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 82

gatctcctgg ttttctaaaa gactgaccaa taattcttca catgtcagaa tctgttatgt 60
ttgtctgacc tccatggag attttgttc tggctaaaat aaaggctaaa taagctta 118

<210> 83
<211> 264
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 83

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tgtggtaga tggggacagg agttttctc cttgcctt ctggggatgg agaaggccta 120
aaccaagncc atgttgtctg gagaggtgca cccaggggtg aagggtctg agaggcctc 180
cacctaccct cagagagcct gggttcctca ggggctcagt gggcagcac ttttgttat 240
tgtcgtata agttcgtagc atta 264

<210> 84
<211> 60
<212> DNA
<213> Rattus norvegicus

<400> 84

gatctccag gactcaagac accagttggc agaggaagag cctggcttcg gttggcatta 60

<210> 85
<211> 136
<212> DNA
<213> Rattus norvegicus

<400> 85

gatcttggtg agtgtcacct ttttatttt ttgtttttc gagacagggt ttcttctgta 60
tagccctggc tgtcttggaa ctctgttagac tgggttggct tctgactcag agctctgcct 120
gcctctgctg ggatta 136

<210> 86

SO_3170 US

<211> 85
<212> DNA
<213> Rattus norvegicus

<400> 86

gatccaaggt atgaagacgc agagtaaacc ctcagttatc aaacggaaaa agatggcag 60
ctaagatgca tataaayyyy agcta 85

<210> 87
<211> 145
<212> DNA
<213> Rattus norvegicus

<400> 87

gatccaaaga tttcttaactt ggctcccttg ggcattcctc gaaggattat caagaacaca 60
accttccgtg gcttcttcct ccccaaggc accgatgtgt tccatatatt agttctctg 120
atgacagacc caaagttctt cccta 145

<210> 88
<211> 346
<212> DNA
<213> Rattus norvegicus

<400> 88

gatccagtaa attctcttca attccctgtt gatttactaa gtgaccaccc atttcctgcc 60
ctcactaagt gacaataacct tccctgcaga cccactaata cacgcttcct tcataccata 120
ctcaggaagt gaccatgtca actgagccct tctgactgac tgtccgactg tccttgtcaa 180
ttgccactct catgtcccct ccctctctca ctgccacact cctccatcag catgttagaga 240
gtgtctttt caactttggt ctttcctttt gtggacaaca tttctgcaaa agagcaaggg 300
tctggaactt gccctggcct ctgaccctg gatgtgtgtg ctgcta 346

<210> 89
<211> 205
<212> DNA
<213> Rattus norvegicus

<400> 89

gatccagagt tcaagggtcag cttggatac atatgcgtt ccagaccaac ctggatata 60

SO_3170 US

ggagacccca tctcaaaaaa acaaaccaac cctgccctcc agtaaccgtc caggagagt 120
tggtggtgca ggctgagccg ctctataccc agcctctgag aactttgtcc tctcggaac 180
ttgatagcct gcgggttgtt ggcta 205

<210> 90
<211> 211
<212> DNA
<213> Rattus norvegicus

<400> 90

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acctgtatca gagagaattc tgggggctt cgaggcaccc tacactccat gctccagtt 120
tcagccccc ccacctcacc cccatcttt tagtcttacc tgagggttgt tgacagcctg 180
cctatgtttt ctctgttgtc ttccctaccct a 211

<210> 91
<211> 166
<212> DNA
<213> Rattus norvegicus

<400> 91

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ccgttggcgt gtaggtatcg gattagtcag ccgtagttt cgtctcgca gatgtgggtg 120
actgatgaaa atgctgttat ggtatcagac gtgtagtgtt ttgcta 166

<210> 92
<211> 148
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 92

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tgaggttcc tcattgcattt cgatagggtt atcatgattt cccactaac tcattttctg 120
gctggcctct tttatanagc tcggcccta 148

<210> 93
<211> 52

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 93

gatccatgga ggtggactaa taatagcgga gcatacaccct atagtgtgac ta 52

<210> 94
<211> 43
<212> DNA
<213> Rattus norvegicus

<400> 94

gatccatttc ttttagcagt gaaacagctg gccattgtaa cta 43

<210> 95
<211> 228
<212> DNA
<213> Rattus norvegicus

<400> 95

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atggagtcct
cactgtgaat ggaccaagga aacaggcctc tggccctgag cgccaccattc 120
ccatcacccg
tgaagagaag cctgctgtca ctgcagcccc taagaagtag attcccttcc 180
ctcggtgcat
tttttaagac aaggaagttt cccatcagcg aatgaacatc tgtgacta 228

<210> 96
<211> 103
<212> DNA
<213> Rattus norvegicus

<400> 96

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agaatcaggg
ccagtgtgg tcttgctggg ctttagcgc atcgggttgc cta 103

<210> 97
<211> 343
<212> DNA
<213> Rattus norvegicus

<400> 97

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cg atgccccatc

SO_3170 US

cccttgcct taaaaagccct tctaagctcg gcctgagaac tcctcctcac ccttcacct 120
tcccagccca aggctccgag ggtcccatca gtgctgatga gtctggcctt tgagtttc 180
ttgacaattc ctaatggttc taaagcctgg agcccccgga aactgtgagc taaggagaca 240
tagcacaaaa tcataaatga gttgcgggaa gaggctggaa acagtgtgca agaaatacag 300
gccaggggtt ggggatttag ctcagcgta gagcgcttgc cta 343

<210> 98
<211> 50
<212> DNA
<213> Rattus norvegicus

<400> 98

gatccccatt agcttgcc tggccaga aaaggccaaa gccagcccta 50

<210> 99
<211> 48
<212> DNA
<213> Rattus norvegicus

<400> 99

gatccctggg gcttgctggc cagccagaag ctgcatttgt gagctcta 48

<210> 100
<211> 72
<212> DNA
<213> Rattus norvegicus

<400> 100

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cgatcatacc ta 72

<210> 101
<211> 200
<212> DNA
<213> Rattus norvegicus

<400> 101

gatccctgcc atctgcgaca tccccaccga gatgcacatt tctttttgc ccccatccga 60
acactcaaac accctgtatt catctaaggg tctgggagag tctgggtgt tcctggctg 120

SO_3170 US

ttcggattt tttccatcc atgacgcagt gagggcagcg cggcaggaga gaggcatctc 180
tggaccatgg aagctcacta 200

<210> 102
<211> 143
<212> DNA
<213> Rattus norvegicus

<400> 102

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ctgttttag aactccggat actacttga ctctggcttg gggcgaagga agtgcacccc 120
agatcaaaaag caacacattt cta 143

<210> 103
<211> 343
<212> DNA
<213> Rattus norvegicus

<400> 103

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cttacaatcc tgcaaggatt ccacccaagt cagcagcagt cacggccctc cttcaactgat 120
gtgtgttctg cctgctcagc ccctgccaca gaggcctgga ggtgtggag tgtggctaa 180
gcacagtctg ccattcatttga ccgcagaccc ttggaccca cccccactcc ctccagacac 240
tggtaagaga agccttcctg caacatgtcc tgtcctcagg aggtgagaca gcagagtgt 300
tccattcact cgatgacccc attttgctc ttcccttggg cta 343

<210> 104
<211> 41
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 104

gatccgagnc aatgcgtggc atttccctctt cattggccct a 41

<210> 105
<211> 67
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 105

gatccggagg aactacagag acatggatat ctacgtcaca gccaatggca ttgatgatct 60
tgctcta 67

<210> 106

<211> 192

<212> DNA

<213> Rattus norvegicus

<400> 106

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taatgccctg cactgacaca ttaaagcctt ggtacaggcc cttaatccca tcagatttgt 120
agatcttaac caggcagtca ccaaggcctt tgaattccct ttcagctcca gctttgccca 180
catcagctgc ta 192

<210> 107

<211> 97

<212> DNA

<213> Rattus norvegicus

<400> 107

gatcctatga tcctgaacgg cagcctgtgc tctctgtcta ccagccagag gacaaccctg 60
gaggctctcc cgagactccc tgtactcacc cctgcta 97

<210> 108

<211> 42

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 108

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<210> 109

<211> 67

<212> DNA

<213> Rattus norvegicus

<400> 109

SO_3170 US

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ttgccta 67

<210> 110
<211> 207
<212> DNA
<213> Rattus norvegicus

<400> 110

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ggtagtggc gaacctggag tcacagtcac tcgcctggcg gtcagccaag taccacgaag 120
tggaaagcca gctgagctgc tgaagatgtt tggatttgc aaagacgcca ttgtgcaagc 180
tgtgaaggc cttgtcacca agggcta 207

<210> 111
<211> 271
<212> DNA
<213> Rattus norvegicus

<400> 111

gatcctccat gacaaggaa caggaagaaa tgataatatg aatggtgat catgaatatc 60
ttcacaatct ttccctgtga tgaatttagca tctccagctc tctgcctata tagtagatat 120
ggaccacaaa gaagtaaata atggtgtca atttttgtca aggaatctt agaggcccac 180
acaattccaa attctcactt catgtcagag attgaatgtat tgaaaagctt tctgcagtaa 240
attatttacc ctattttctt agcatgtact a 271

<210> 112
<211> 415
<212> DNA
<213> Rattus norvegicus

<400> 112

gatcctcaaa gtggctcagg aacactttgg caaaggcaa tcaaaagact tccaaactgtt 60
cggtctcctt ctggaaag acctgctgtt taaggattct gccttggc tggatcggt 120
gcccccaagg atggactaca ggctgtacct cggccacagc tatgtcactg ccattcgaaa 180
tcagcggaa ggcgtgtgcc cggaggcctc catcgacagc ggcgcgtga aatggtgtgc 240

SO_3170 US

actgagtcac caagagagag ccaagtgtga tgagtggagc gtcagcagca atgggcagat 300
agagtgtgag tcagcagaga gcactgagga ctgcattgac aagattgtga atggagaagc 360
agatgccatg agcttggatg gaggtcatgc ctacatagca ggccagtgtg gacta 415

<210> 113
<211> 152
<212> DNA
<213> Rattus norvegicus

<400> 113

gatcctctca gaacaccagt ctgtgccaat gagggagcag catggcctct gagtgaggag 60
gtgctgggtg taagaccaca ccctccagag ggaagaaagg ctcctcttg gttgtgcgc 120
tgactttctt atactgctcc cttgtgccac ta 152

<210> 114
<211> 295
<212> DNA
<213> Rattus norvegicus

<400> 114

gatcctgaag agcaatgagg gacgtgcct ttcggcgcca gcaccagcgc aatgtcaagc 60
ttatgaggca gatgctaatt gacgctggcc ccccagtcat ccactgcccc agccacatca 120
tccctgtgcg gttgcctga tgctgctaaa aacacagaaa tctgtatga agttatgac 180
caggcataat atctacgtcc aggcattaa ttacccaaca gtgcctcggt gggaggagct 240
cctccggatc gcccccaccc cgccaccacac accgcagatg atgaacttct tccta 295

<210> 115
<211> 76
<212> DNA
<213> Rattus norvegicus

<400> 115

gatccttgcc tgccactatt tctgtatct caatgttttg ttttctcctg acttctgaca 60
ccaagctgat ttgcta 76

<210> 116
<211> 290

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 116

gatctaaaag tatcgccctt catgagaaaag ggaattgttag gagactggag gaaccactc 60
cctgaagccc tgagggagag atttgaggag cactaccagg ggcataatgaa ggactgcct 120
gtgaagttta gaggcagagct ctgagacact tccttgtgtc tgaaattgga gtatgttc 180
atttatcctt cagttttctt tggtttgaat tcagtagaaag tagaagtctt ttgaagactg 240
atggtttaaa ttcattctgg ttttttaaac naacnntttat tttaatctac 290

<210> 117
<211> 228
<212> DNA
<213> Rattus norvegicus

<400> 117

gatctaaccg agactgatcg ctgtctccag gcccggaggat gaagaaaggc ctgagcctcc 60
agtgcgtgagt ggagacttctt caccaggact ccagcatcac catttcgtt ccatggagca 120
tcctgagaca aattctgcga tctgatttcc atcctctctc acagaaaagt gcaatccgg 180
tctctccagc atcttcccta gttaccagg acaacacatc gagaatta 228

<210> 118
<211> 93
<212> DNA
<213> Rattus norvegicus

<400> 118

gatctactta aaaactgctt cgtgacaaaa accacacactg aagaaaatttt aagaattttgg 60
cacagttagt cactttgtgt cacccggaat cta 93

<210> 119
<211> 145
<212> DNA
<213> Rattus norvegicus

<400> 119

gatctacacc acagtttcta acagtagcaa cattacagcc atgaagtagc agtggaaaata 60

SO_3170 US

acttgatgg gggggaaatc accagaatat gaggaactgt attaaagggt cgcagcattc 120
ggaagggtga gaagccactg ggcta 145

<210> 120
<211> 34
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 120

gatctacatt ggaaggcgtn gacaactanc acta 34

<210> 121
<211> 45
<212> DNA
<213> Rattus norvegicus
<400> 121

gatctaggcc ccttcctcc tctaacacctc tttctctcct gccta 45

<210> 122
<211> 363
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 122

gatctcattg gtgcagggac agagacaatg agcacaacat tgagatatgc tctcctgctt 60

ctgatgaagt accncacatg tcacagctaa agtccaggaa gagattgacc gtgtgattgg 120

cagacatcgc agcccctgca tgcaggatag aaaacacatg ccctacacag atgccatgat 180

tcatgaggtt ncagagattc attaactttg tcccgaccaa cctggccat gcagtgacct 240

gtgacattaa attcaggaac tacctcatcc cgaaggaaac aaaagtgtta acatcactga 300

catcagtgtt gcatgacagc aaggagttcc ccancanac gatgttgcc cnanccactt 360

cta 363

<210> 123
<211> 132
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 123

gatctcaggg gaggtatgct taaggccaga gctttcctc agtatttgat tttccagtg 60
tttgttttt taaaaactga caggtgctac atttctatct gttggttca attctgccat 120
atttcatgtc ta 132

<210> 124

<211> 89

<212> DNA

<213> Rattus norvegicus

<400> 124

gatctcagca gcctggttgt cacagtagaa taagaatggc tggcctaac cttccctgtg 60
agtgacgtga atgaatgcct acctggcta 89

<210> 125

<211> 206

<212> DNA

<213> Rattus norvegicus

<400> 125

gatctcattg atcacagcct gggtaggg catttcatg tggcctcat actgaggctg 60
tcggttcctg ccgatcacct gctcaatttc ctcatggacc ttggcctcca catctggatg 120
cttcatgagt agaaggaagc cgtagcgtag tgtggagctg actgtctcag acccagcaaa 180
gaagaggctt agtggta tcacta 206

<210> 126

<211> 71

<212> DNA

<213> Rattus norvegicus

<400> 126

gatctccag atcaagtcct cttgccatc tccatttcga gccacaacag catgagaagg 60
gatccgggct a 71

<210> 127

<211> 129

<212> DNA

<213> Rattus norvegicus

SO_3170 US

<400> 127

gatctccgg ggagtgtatgc tggaagaaaag gcaaagccag aaactcaata aagtatgacg 60
ttaaacgtgt gccttcagg tgcttctta ctgttgcca aaattgagct gcctaagac 120
aaggtacta 129

<210> 128

<211> 247

<212> DNA

<213> Rattus norvegicus

<400> 128

gatctctccc gagagacaca gccagaatac agcaaataca taggcaaatg ccagcagcaa 60
accaccgaac taaaaacggg accccgttt aaggaatcag agaaaggact ggaagagctt 120
gaaggggctt gagacccat atgaacaatg ccaagcaacc agagttcca gaaactaagc 180
cactacccaa agactgtaaa tggactgacc ctgggctcca acctcatagg tagcaatgaa 240
tagccta 247

<210> 129

<211> 347

<212> DNA

<213> Rattus norvegicus

<400> 129

gatctctgcc tacatgaaga gcagccgcta cctctcaaca cctatattt cgaagttggc 60
ccaatggagt aacaagttagg cccttgctac actggcact cacagagagg acctgtccac 120
attggatcct gcaggcaccc tggccttctg cactgtggtt ctctctcctt cctgctccct 180
tctccagctt tgtcagcccc atctcctcaa ctcacccca gtcatgcccc catagtctc 240
attctccccca ctttcttca tagtggtccc cttcttatt gacacctaa cacaacctca 300
cagtcctttt ctgtgatttg aggtctgccc tgaactcagt ctcccta 347

<210> 130

<211> 431

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 130

SO_3170 US

gatctgactg aaatgattat gcaattggta atatgtcccc cagaccaaaa agaagccaag 60
accgccttgg caaaagacag gaccaaaaac cggtacttgc ctgccttga aaaggtgttg 120
aagagccatg gccaaagacta cttttaggt aacaggctga cccgggtaga catccacctg 180
ctggaaacctc tcctctatgt tgaagagttt gatgccagcc ttctgacctc tttccctctg 240
ctgaaggcct tcaagagcag aatcagcagc ctccccatg tgaagaagtt cctgcagcct 300
ggcagtcaga gaaagcttcc cgtggatgca aaacaaatcg aagaagcang gaagatttc 360
aagtttagc ggagctgcac tgtccaaattt ctttatgctt tgcanaaaaat gagaagcaat 420
tgttgatcct a 431

<210> 131
<211> 180
<212> DNA
<213> Rattus norvegicus

<400> 131

gatctggatg aaatagttct ccattaccct tacattcccc ctggggagaa agaggcaagt 60
cttgccaaaa tcaaggacaa agcaaggaac cgttacttgc ctgccttga aaaggtgttg 120
aagagccatg gacaagatta tctcggtggc aataggctga gcagggctga ttttaccta 180

<210> 132
<211> 156
<212> DNA
<213> Rattus norvegicus

<400> 132

gatcttactg tgcacagctt tagatcatga ttttagcag attgttaactt ccattcatga 60
gaagaaactg cacaaaccat ctcatccctg tcttatctt attgtattgg aagctttctt 120
taagttacca tatttttagag cgttgttagt gcccta 156

<210> 133
<211> 187
<212> DNA
<213> Rattus norvegicus

<400> 133

gatcttcagt taattcagtc agctatggat acactgtacc cacaaagcca gcctcagaaa 60

SO_3170 US

gctctgcaac aatgaagtat tttgactaaa tgttgaccgt acttattggg aggtaacat 120
gttttctaag gcttctgtgt taattcatat agacatgact catgaggaat tgctggatg 180
ccatcta 187

<210> 134
<211> 295
<212> DNA
<213> Rattus norvegicus

<400> 134

gatcttgta acctgacgga agcacagaga ctgcagaatg ttggcaatgc cagagaatat 60
gttcctgtgg gaaaggccc agatacacac tccagagcta actctgaaac gtcaagaaat 120
caaagcccg aatctcgtgt aggcaatgg agactcccc aaggacacga aacagctgtt 180
aaagtagcgg gcagtgtgtc cgagaagctg ccctccagca gcctgctcat ggacagagct 240
gaagcagcca gccttgacaca gtcggcaggc cacgaggact ggaaagtggt gtcta 295

<210> 135
<211> 93
<212> DNA
<213> Rattus norvegicus

<400> 135

gatcttgca agggaaatgg tcagcatcg cccttgtcct cagcctgtgc tttgagtcct 60
tgtccccatc cctcacactt tccctccatg cta 93

<210> 136
<211> 156
<212> DNA
<213> Rattus norvegicus

<400> 136

gatcttgaga ggtgccctgg gatgaatgcc gtttacagtg tgcatgtcct ttgaggtgt 60
ttggaaaagt gcagcgaatt ttaacgtatg tgatccgcca tgctgtgaaa acactattgg 120
gataacctccc ctgtgacggt attggaggtt tggcta 156

<210> 137
<211> 73

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 137

gatcttgttc atcacatgac ctcttgcgg ggtcacaggg agtaaaaatg tgtccctgtc 60
ctgttgtcag cta 73

<210> 138
<211> 137
<212> DNA
<213> Rattus norvegicus

<400> 138

gatcttgaag ttttcatgat tttaagagt cagaatctt tgtgatgatt cacagtacgc 60
ttagaataag gtgatttttg tttagccac agactcatgg gagtagatta gtgtaagtt 120
ggatgaacctt cacccta 137

<210> 139
<211> 125
<212> DNA
<213> Rattus norvegicus

<400> 139

gatccaggct ccagttgtca tggctgcttt gatgagccct ttcccgaaaga cttgctttag 60
tttgggctgg agttcaaagt tctgcagccc tccgtgcaca gagatgagaa gtttgggaag 120
ctcta 125

<210> 140
<211> 103
<212> DNA
<213> Rattus norvegicus

<400> 140

gatccatgga ggtgcactgg ttataggcat ggcttcattt tatgatggct ccatgctggc 60
agccatggag aatgttagtgg tggtaactat ccaataccgc cta 103

<210> 141
<211> 172
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 141
gatccaaacca caaacccaca gggtgacaca ctggatgtct ctttcctcta cctggagcct 60
gaggaaaaga aactggtggt ctcgccttgc cctggaaagg aacagcgctc ccctgagtgc 120
ccggggccccg aaaagcaaag aacccctga tgctccccgc tgagactcac ta 172

<210> 142
<211> 238
<212> DNA
<213> Rattus norvegicus

<400> 142
gatccgtgct ggccacaccc agagcaccaa ggatggggag ctcaggccat atggccaagc 60
atgtgtggat gacagcaaag gtcagaagct actgcctgcc cctctggttt agatggttgc 120
tcaggagccc agacttcgac tcatggtgtg ccagggaggg ctggggacaa cagggggtcc 180
cttcccaggc ccatctgctg ccccacactg atctgcctgt ctgtctgtc gctctcta 238

<210> 143
<211> 104
<212> DNA
<213> Rattus norvegicus

<400> 143
gatccgtatc tggctgttagc ttgcgtcctc agcaaacaga ggcgcacatga aagccccat 60
ggatgtccct ccgattatgt ccacggggat gccacattct gcta 104

<210> 144
<211> 178
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 144
gatccgggac agtgcagggc agaagggcac tggaaagtgg acggccatct ccgcgtgg 60
gtacggcatg cctgtcaccc tcatcgaga agctgtttt gtcgggtgc tgtcttctct 120
gaaggaggag cgagttcagg ccagcagana gctgaaggc cccaagatgg tccagcta 178

<210> 145

SO_3170 US

<211> 157
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 145

gatcctaaag cgcaaagtca tagagaaagc gcaacagatt caggctgc agaaagacgt 60
ccgggatcg ctgatagaca tgaagcgct gnaggttaac ctgaggcn 60
tgtcttgac taagaaaaaa ggaatangaa cactcta 157

<210> 146
<211> 207
<212> DNA
<213> Rattus norvegicus

<400> 146

gatcctccgg gttatagatc aagagttca tgggtttagg atggcatcct gccaaaatat 60
ctccggtggc tggatcaaca gtcaggttat ccactaagggt gcccagctga attaccttca 120
ctggagttaa atcccaatta ttgtgtttt tcattatgtg aatgttctta gctgttacat 180
cagctacata gacatacttc tggctca 207

<210> 147
<211> 453
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 147

gatccttagc ccatgcagca gtgttcttc cgttcgtgtt ttccaggaca gtctgggtct 60
tcacaaaggc tacgtctccc ttctcaacga ggcactggaa agccctgtta taaccattat 120
atccctctct gttgttcgga gcacatttg ctggccaat acacaggta cagagggtgg 180
aattcttctt atagccagga gcacagcatt gactgaaaaa ttcatcgaac ttgcagtgg 240
tgatcctgct gaacagcagg cccataggaa tggccagcc ggccgttctg tctactccag 300
tatggcagga cttcttgct ttcaggttg lccagttgtat gctggagtct gatgccttca 360
ccacagccac ggcataatac ctttaggaa agacatctga ttgtgggttt gtacacgaag 420
agatatcata gttctctgcc atgacnggca cta 453

SO_3170 US

<210> 148
<211> 140
<212> DNA
<213> Rattus norvegicus

<400> 148

gatctatttc ttcatccttt gttctataca atagaatgcc tctctgtctt gaagtccagtc 60
caagaaatgc ttaatgggtt cctgtattct ttcttcctgg attactcagt gctgagtgg 120
gacttctcac caggactcta 140

<210> 149
<211> 258
<212> DNA
<213> Rattus norvegicus

<400> 149

gatctacgca accgactcgg gcagttaccgc aacgaggtaa acaccatgct gggccagagc 60
acagaggagc tgcggtcgcg cctctccaca cacctgcgc aatgcgc aa ggcgcctgatg 120
cgggatgcgg atgatctgca gaagcgcctg gcgggttaca aggccggggc acaggagggc 180
gccgagcgcg gtgtgagtgc tatccgtgag cgccctggggc cactggtgga gcagggtcgt 240
cagcgcacag ccaaccta 258

<210> 150
<211> 98
<212> DNA
<213> Rattus norvegicus

<400> 150

gatctagaag gcaagagtaa tctcggtgct gacgctccac atcagaacgg tgaatgccac 60
cctaatgaga agggctctgt cagcatggac ctggacta 98

<210> 151
<211> 64
<212> DNA
<213> Rattus norvegicus

<400> 151

gatctagatg acacggagga gccccaggac cttccctgag gtgatttcac ccttggtgcc 60

SO_3170 US

acta 64

<210> 152
<211> 136
<212> DNA
<213> Rattus norvegicus

<400> 152

gatctccaca tcagtaactac aatggctatg agaaaggcct gcaagcttc tccatggaca 60
aacacctggg ccacggcttc gctccgcagg tagatattt cgatctttc tggagctatg 120
tactctcctt gggcta 136

<210> 153
<211> 132
<212> DNA
<213> Rattus norvegicus

<400> 153

gatctccgga ggtgcggtgtc ctctgggtgt aagaccagct ttgaagcact cctacagaga 60
catctgagca gaggggcctg gcactccagg caggcgagcg atgctcaagc ttgttaccag 120
tctggtctcc ta 132

<210> 154
<211> 218
<212> DNA
<213> Rattus norvegicus

<400> 154

gatctccacc gaactggtga agagoaagct cagggagacc actggggcag cctgcaaata 60
tgggtaagc aactacatgt gtattccag tccctgtcta aagatagaga cgtcatgtt 120
ccatagctgc tcacgctcot gtgagctgcc ttctccccat cctaagtctt cctcagctt 180
cctaaacacc tcatccactc cttcctccc taagccta 218

<210> 155
<211> 124
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 155

SO_3170 US

gatctccatc agaaaaccaaa atgatcagag agactgagtc ggggttcagc aatcccatgt 60
tactggcttc gttcagaatg aaaattgctc tcagcagncc tcattgatat ttgtgcctcc 120
acta 124

<210> 156
<211> 218
<212> DNA
<213> Rattus norvegicus

<400> 156

gatctcccccc agcagcagct ccaccacaat cagaagcttg tgcaccgtct gtttgaagcc 60
aactgctgtg tgctgtggtg ctttcgaag ggcattggc atcgttctcc gggcttcaga 120
gtactccagt tggatagcct tgattcgccc tgtgttagtag aggtacctgg cccactcatt 180
gtttagcc ttgcgggaa acacagactt ggacacta 218

<210> 157
<211> 43
<212> DNA
<213> Rattus norvegicus

<400> 157

gatctcattt taacccgtaa ccagtctata tgtgtttgga cta 43

<210> 158
<211> 357
<212> DNA
<213> Rattus norvegicus

<400> 158

gatctgaagc aggaagactt ccagctgctg tgccctgatg gtaccaagaa gcctgtaacc 60
gagttcgcca cctgccacct ggcccaagct ccaaaccatg ttgtggtctc acgaaaagag 120
aaggcagccc gggtagcac tgtgctgact gcccagaagg atttattttg gaaaggtgac 180
aaggactgca ctggcaattt ctgtttgttc cggtcttcca ccaaggacct tctgttcaga 240
gatgacacca agtgtttgac taaacttcca gaaggatcca catatgaaga gtacttagga 300
gcagagtagtact tgcaagctgt tggaaacata aggaagtgtt caacccacg actccta 357

SO_3170 US

<210> 159
<211> 47
<212> DNA
<213> Rattus norvegicus

<400> 159

gatcttggcc ttcacgttct cgatgggtgc actgggctcc acctcta 47

<210> 160
<211> 113
<212> DNA
<213> Rattus norvegicus

<400> 160

gatcttatca caccagccag caaagtacctg gaagggtctgg atggacatgc ccacgtgcgt 60
cttcagggcc agcgtgtaga cggcacctgc atccaggccc tcaatggtg 113

<210> 161
<211> 163
<212> DNA
<213> Rattus norvegicus

<400> 161

gatcttggat gatgacaatt ttctgggagc tgagaatgcc tttaacttgt ttgtgtgtca 60
gaaggacagt gctgccacca ctgatgagga gcggcagcac ctacaggagg ttggtcttt 120
ccacacctgggc gagtttgtca atgtttctg ccatggctcc cta 163

<210> 162
<211> 180
<212> DNA
<213> Rattus norvegicus

<400> 162

gatcttggtg accatgctac cctgaagagg tccccaggag attgcaagag tgccccaaact 60
acagaggaga ctcgcaggct gtctcaggcc atgatggctt ttactactga cctgttctcc 120
ctgggtggccc aaacatccac cagctccaac cttgtcctgt cacccttag tgtggcccta 180

<210> 163
<211> 179
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 163

gatcttaact gcagattcta cacatttctc atcctcta at ggc ttc ct ggctgccagg 60
ctgaagaaac ttcttcactg tggggagggtt gctgactctg gttctcaggg ccttcagcag 120
agggaaagttg gccaaagcgc tgggtccag ctcttccaca tggtagagaa cttgaacta 179

<210> 164

<211> 217

<212> DNA

<213> Rattus norvegicus

<400> 164

aattcacagc tgaggaatgc taaatggctg agaagcacct aaagaaaatgt tcaacatttt 60
tagtcataag ggaaatgcaa atcaaaaacaa ccctgagatt ctacccata ccagtcagaa 120
tggctaagat caaaaaactca ggtgacagca aatgctggaa aggatgtgga gaaagaggaa 180
cactcccca tttttggtgg gattacagaa tggttta 217

<210> 165

<211> 197

<212> DNA

<213> Rattus norvegicus

<400> 165

aattcacaga gacggctgcc atatttgaag atggctccag ggaggatgac attgatgtgg 60
tcatcttgc cacaggctac agctttgcct ttcctttct tgaggactct gtcaaagttag 120
tccaaaaacaa ggtctccttg tataaaaagg tctttcccc taacctggaa aaaccaactc 180
ttgcaatcat cggttta 197

<210> 166

<211> 419

<212> DNA

<213> Rattus norvegicus

<400> 166

aattcagttt acatcttggc cacagccat ctctctcc tc ttccttagtc ccatccttgc 60
cagatccctg tcccaattgc cccctccact tgggtaccac ctaaccctgg gacatctgct 120
tcatgttagta ctagctatat ctttctcac tgaggcctaa ccaggcagtc ttggtaagga 180

SO_3170 US

tgagatccaa tgcttaggaac tatagactga gacaaccca gttctgtgg gagcagctaa 240
agatggcacg acatccagtg gtctttgtg gtatacaacc ataacatggg tatatagcca 300
tgtccctggc cttcttctgg catttacaag gccagggtga taagcatgtc aataaggat 360
ctcacacccc accaattcctc agaaggacaa gtttacagcc actgcctgtt ttgtactta 419

<210> 167
<211> 159
<212> DNA
<213> Rattus norvegicus

<400> 167

aattcagtct tatcaatgaa ggtcagagcc attggaaag gtgaagtgg ggagccctgt 60
catcgatccc aactgggtcg gaaccctccc acgcatgact caattcagag ctgtttccca 120
ggaggctggg gcgggatgca gacagattcc aacacctta 159

<210> 168
<211> 110
<212> DNA
<213> Rattus norvegicus

<400> 168

aattcagcag aactccttga gggaaaatca tgatccagg atgatttcat cccgtggcac 60
aacctttaga ataatgggtt ttgttggtt aagaagtctt tgtctgctta 110

<210> 169
<211> 199
<212> DNA
<213> Rattus norvegicus

<400> 169

aattcatcgt aaatggactc ctcaacaaaa agtctggatg ctgcacaca aatctgaccc 60
tggtggaaga atactccttg gtgtcaaacc tcattcagcac tatccaagtc agcatctgca 120
aacacaatgc aagggtcttt tcccccaagg tccagggtga ccctcttcag attgttttc 180
cctgcagctt ctttgatta 199

<210> 170
<211> 380

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 170

aattcctagg gaagtccggaa ccagagcgcc agcaactgagc ctggcccggt aaggagcatg 60
qaqaccacc ttccttccct tctccctgaa cagcagtctg gcacccagaa gctcagatg 120
ccaccacctg tggtgctcag gagcccagcc tagaaagagg actccgacac agcgggcagn 180
ggctccacag acggatctat gagaaaaata cgggggcagg cangcaggca ggcgaccccc 240
tgaccctctg gtggccgctg tatctgagcc cttttggaa ggcttataga caacaggtgg 300
agcccatacg ctgggcatacg ggagcctggg aaggqctcaq gagctcagga ccactccagg 360
ctctcttagca ccaccgctta 380

<210> 171
<211> 366
<212> DNA
<213> Rattus norvegicus

<400> 171

aattccctgg ctggcagac gtcaccatcg cagaagtggc ctgcaccgct gagcgtgg 60
tttgcagcaa gtactcggtt cgaggctacc ccacattgt gctttccgg gggaggttag 120
aaagtgggtg agcacaatgg aggcagagac ctcgactctc tacacagctt tgttctgcgc 180
caggcaaagg atgaactcta agaacccctgg tgaagccgtc atccaccctg gccttatgca 240
ccccgtgcat aggagtgacc tcacatggac atgcgtatct tcactgtgg tagtcagaac 300
gctgaatgta ttgagcttgtt gttgcttgcgt gttgtccctt tgagccacca cacactacgg 360
acctta 366

<210> 172
<211> 339
<212> DNA
<213> Rattus norvegicus

<400> 172

aattccatca gtaaagctaa agcagctacg tctggtccgg tctcttcttgc atctgtttct 60
agatatggaa gcagctacag ggcaggaggt cgagctatgt tttagaatgca tcgaatggc 120

SO_3170 US

caaatacagag aaaagaacct tcttacgcc agcattggag gcaaggctgg tgtctttgta 180
ttttgataacc aagaggccc aggaagcatt acatttgggt tctcagctgc ttcggagtt 240
aaaaaaagatg gatgataaaag ctctttggt gaagtacago tttagaaag caaaaacttac 300
catgctctga gtaatctgcc gaaagcccgaa gctgcctta 339

<210> 173
<211> 290
<212> DNA
<213> Rattus norvegicus

<400> 173

aattccaaga gttcgaggtg gtggcaccca ccgttctggc cagggtgct ttggaaacat 60
gtgtcgtgga ggccgcatgt ttgcaccaac caaaaacctgg cgtcgttggc atcgcagagt 120
gaacacaact cagaaacgat atgccccatctg ttctgcctcg gctgcctcg ccttaccaggc 180
tttggtgatg tctaaaggtc atcgtgttga ggaagttctt gaaactgcctt tggtggttga 240
agataaaagtt gaaagttata agaagaccaa ggaggctgtt cagctgctta 290

<210> 174
<211> 199
<212> DNA
<213> Rattus norvegicus

<400> 174

aattcctaact actcaggctc tgcccggtgg cttggctgca ggacagcgac ttgactccat 60
gacttgactc caccccgagct tccaccttgg ccgggactgc tctaccctgt gagccaaaca 120
ctttaggtgt aagtaggtac actttgtat gtcactgacc tagtgtaccc tttctttttt 180
catatctata ctgacaccaa 199

<210> 175
<211> 165
<212> DNA
<213> Rattus norvegicus

<400> 175

aattcccaagc aacagataca atgaggggt gcgctgagct cttcctgccaa gaagcagacc 60
atcttctcac ggcatccctc atctcacaag tgtccaggac catggggaca ttgcattcaa 120

SO_3170 US

agcaccgtac ctgctttcta attgatggtc aaggatatat gctta 165

<210> 176
<211> 46
<212> DNA
<213> Rattus norvegicus

<400> 176

aattccagca ataagaaatg aacaaagatt ggagctgaag acctta 46

<210> 177
<211> 39
<212> DNA
<213> Rattus norvegicus

<400> 177

aattccgaat gtggattgtg atttcctgc ttccactta 39

<210> 178 <211> 283
<212> DNA
<213> Rattus norvegicus

<400> 178

aattccaccc aaggctgctg ggtctgactg gttctacaga acaagtggcc catgctagtc 60

gcaactaccg tgtatactac agcgctggc ccaaggacga ggaccaggac tatattgtgg 120

accattccat tgccatctac ttgctcaacc cagatggct cttcaactgat tactatggc 180

gtagcaggc agcagagcag atcgttagaga gtgtactgcc ggcacatagc tgccttccat 240

agcataactgc cctgaactgt gtactgccta ggccctgtca tta 283

<210> 179
<211> 223
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 179

aattccacag aagggttgtat ggagatttga tggtaagaaa ccagataacct taggatctaa 60

cactcggctg tacaagtggc tccccagaa tgacnttctt ggtcatccna aaaaccnnaaa 120

gctttttagt ctcatggtg aacaaatggc atctatgagg caatctacca tggcattcct 180

SO_3170 US

attgttgta ttcccttgg tgcagatcaa ccggataaca tta 223

<210> 180
<211> 182
<212> DNA
<213> Rattus norvegicus

<400> 180

aattccctgg ctttctgggt ctagagtgtt ctgtgcctcc aaggactgtc tagcgatgac 60
ttgtattggc caccaactgt agatgtatat acggtgtcct tctgatgcta agactccaga 120
cctttcttgg ttttgcttgc ttttctgat tttataccaa ctgtgtggac taagatgcat 180
ta 182

<210> 181
<211> 189
<212> DNA
<213> Rattus norvegicus

<400> 181

aattcctcat tggcatgtc accgaaggcg ttcatctcca tgtaaagcc gtgcttcccg 60
ttgctgtact ccccattgtg tagctggatc atcctcatgt tcttctccca cactgctctc 120
ctccactctt cctcattcgt gccatacagt cttctgtgtg tggacttcca ctggtgccac 180
tgtgcatta 189

<210> 182
<211> 160
<212> DNA
<213> Rattus norvegicus

<400> 182

aattcggggt cctctgaaag ctaccagggt ttctcatctt ccctagagct tgttagtgtaa 60
agtgacagct agtgtgtgcg cgcgctctct cgctctctct cttctccct ctctctctcc 120
ctattccctc ccctcctctc ctctgccccct tcctggttta 160

<210> 183
<211> 287
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 183

aattcggggta gaagnagaag ccgatataca tcaatgtcgt cagggaccga ttgagaggct 60
agtttcctac tattacttgc tgaggtttgg agatgattac agnccggac taaggaggcg 120
gacacaagga gacaagaaga cttcgatga atgcgtggct gaggcggctc agactgtgct 180
ccagagaagc tctggcttca gatcccggttc ttctgtggcc actagcttag aatgctggaa 240
tggttggaaagc agatggcgta tggatcaagc taagtacanc ctggta 287

<210> 184
<211> 135
<212> DNA
<213> Rattus norvegicus

<400> 184
aattcgtcaa agcagcacca ggccccgac tgtgccaaac cactgaagaa gcgccccatc 60
atctgaaagg caagcaaagc tgatcaactt caggctgcct tggttgtcat ctctaacatt 120
cataatctag agtta 135

<210> 185
<211> 79
<212> DNA
<213> Rattus norvegicus

<400> 185
aattcgacag tgtcccatgc agacattact aattgattct gtttttatta tggaaccttt 60
tggctggcca ggtgtgtta 79

<210> 186
<211> 413
<212> DNA
<213> Rattus norvegicus

<400> 186
aattcgtagg aagcttcaaa accaaacaag acttcataga tttgattgaa gtcatctacc 60
ggggagctat gcgaggaaaaa cttattgttc aaagtcctat tgaccccaag aacataacca 120
aatacgacct cctctatcaa gacattnagc actcgctgct gttggagaga agagaggcac 180
aggctgaagc agaacctgaa ctcagagagc ctgtggtctg gagtccctca gagacatgct 240

SO_3170 US

cactgcctga gcaaagagg ttcataagg tc tgtaatcaac ggccctctg cagaagcccc 300
agtgctccca gaatggagat gcctgagcgc ccattctctg agagcctcag agcagtgagc 360
gagtgacagg tggcattgt a cggaccctt tatcttgact gtctttcccc tta 413

<210> 187
<211> 362
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 187

aattcgggca gggcatcatg gtccataaac atgagggat gaaggcttt gtgccactg 60
gcttttcagc ctcccttcc gagctactgc atgccccaga aaagtgggtg aaggtcaagt 120
ccccaaactc atctcctatt cctacatgga acgtggggc cncttgctg ccttgaaga 180
gcccaagctt ctggcccagg acatccgcaa gttcggtcc ctggctgagc tgcagtagtg 240
acactggata ccaactgtgg cttagcagc agccctggtt cctcccaagt cacacttatg 300
gaagatgacc ctttctnag gaataagttt gttccctgac cacactcgag gaccagact 360
ta 362

<210> 188
<211> 74
<212> DNA
<213> Rattus norvegicus

<400> 188

aattcggggc tgttcagat ttccctacact ctgattggta ggtgtgtcca tctggacagt 60
ttattcttagc ctta 74

<210> 189
<211> 267
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 189

aattcggggg gccgttggc ttacggcga tgctgatcct gctgcctgcc accatgttcc 60
acctgcttct ggccggccgc tcgggtccgg cgccctcct ggccctacca gcctatctgc 120

SO_3170 US

ctgggctgga ggagctgtgg agcccacggg ctctgctgct gttgttcatc tggctcgcc 180
tgcagggtggc gctctatggc ctgcctgcac gcaaggtggc cgaggggctg ganctgaagg 240
acaagagtgc cctgcgctac cctattta 267

<210> 190
<211> 192
<212> DNA
<213> Rattus norvegicus

<400> 190

aattctaaac atatgccatt gtggaagaag caaagccacg gagatagcag gccagtgcag 60
attcactgat gtgacaactg cattctctca gtttaggaca ttggtgaaag gagcctctgc 120
acttatgggc tgtgttagcta tggAACCTT gtacttcctg ccaattttgc tctgaaactc 180
aaactgcctt ta 192

<210> 191
<211> 83
<212> DNA
<213> Rattus norvegicus

<400> 191

aattctagat ttcttgtaa actatcaaat ctgtatatgt atgtaataaa gtgtctaattg 60
ctaggagttt attggaaggt tta 83

<210> 192
<211> 56
<212> DNA
<213> Rattus norvegicus

<400> 192

aattctcaga aactatataaa tacattctgc tgTTGGCCAA tgcaaagtgt acttta 56

<210> 193
<211> 42
<212> DNA
<213> Rattus norvegicus

<400> 193

aattcttcag aaatgtggtg tctaagaaca ccagaccctt ta 42

SO_3170 US

<210> 194
<211> 133
<212> DNA
<213> Rattus norvegicus

<400> 194

aattctatgc attgatttac atgtactgaa ccatacttct ttgactgtaa tggagccaac 60
ttgtggtaaa tggttatccc cataatgttct tgacttgata taaaatattt tactataaac 120
ttttcatatg tta 133

<210> 195
<211> 79
<212> DNA
<213> Rattus norvegicus

<400> 195

aattctgacc acatgagctt cctagacaga gtgaagaata tgcttatcc tgtgccatgg 60
atgtatttat gccatgtta 79

<210> 196
<211> 65
<212> DNA
<213> Rattus norvegicus

<400> 196

aattctcctt gtagtagcgt tggaggaga caatggttcc tgcgtccag tagatcatga 60
tgtta 65

<210> 197
<211> 64
<212> DNA
<213> Rattus norvegicus

<400> 197

aattcttcag aaggtagtg aagctatgg catatgtaaa taaaactgcta agattgtcat 60
gtta 64

<210> 198
<211> 41

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 198

aattctgcga nnaagttcaa atacaatagt gctggcagtt a

41

<210> 199
<211> 36
<212> DNA
<213> Rattus norvegicus

<400> 199

aattctgcaa attgccttac agactagcca tactta

36

<210> 200
<211> 218
<212> DNA
<213> Rattus norvegicus

<400> 200

aattctctac catctgttac aggctgtggg atgtcagagg aaggaacggg gtttggttgt 60

ggtaaccagg gcaggaccga gcagcaggat tcccgcaaga gaaaggaggc agatgggcct 120

ttcaagagct ttaggaagcg actaacagca gagtgtctgg gaacatacga atcagtctct 180

tgcataattgt aataaaccua acacaagact cgccatta 218

<210> 201
<211> 151
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 201

aattcagcct gaggagggaaa tcagtcstatg gtntacttcg tcctgcctct tagttctgt 60

acctgcttgt cacatttgca cctatgagtc aagacatgtt tgttaccttt attttgattt 120

atttctattta caattcaatt ttttccttt a 151

<210> 202
<211> 63
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 202
aattcagtca cgactttat gccttgaaa gttgtcacca ttttattgtc accctccatc 60
tta 63

<210> 203
<211> 221
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 203

aattcctctt atcaactgca tacaaagtgt nttcaataaca atttttccg tataaaaata 60
ctggaaaaaa ttgataaata acaggtaaga gaaagatatt tctaggcaat taggattgtt 120
ggcacagtga gtcctgtgg gtgttggac acagccacag gacaggcctc ctgacagtgc 180
tgcagatcag acggcaaaag aaagcagaac tgtctggtt a 221

<210> 204
<211> 178
<212> DNA
<213> Rattus norvegicus
<400> 204

aattcctcca tcattgcaga ccggattgca ctcaagctgg ttggccctga gggctttgta 60
gtgacagaag caggattcg agcagacata ggaatggaaa agttcttcaa catcaagtgc 120
cggtattctg gtctccagcc tcatgtggtg gttcttggtg ccactgtcag ggctctta 178

<210> 205
<211> 233
<212> DNA
<213> Rattus norvegicus
<400> 205

aattccagaa gaaaaaggca ggatcacagt cctagtgggg aagctgcttc ctggccacc 60
cgaagacacc aagttcaacc accgtccatc cagaaatgag aagaacaata ccctagagca 120
aagtcatcca cacccagtac acactccgct gctaaccctga aatgcatgaa cagaaaccca 180
tagtattttat gccctctag gcaggtgtcc acaataaaat tgtgagcagc tta 233

SO_3170 US

<210> 206
<211> 74
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 206

aattcggaaag gaactctcca acnnctcggtt cagggagata tagccgcttt ctatctaaaa 60
gactcattac ttta 74

<210> 207
<211> 54
<212> DNA
<213> Rattus norvegicus

<400> 207

aattctccag ataatggtca ttaagacaat tctttccagc atgctcaagg gtta 54

<210> 208
<211> 240
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 208

aattcacggg aaatgncttg tgcttagcat ggagaagaag gaagtggaaag ggaatgggaa 60
tcaaactctt ctaacattgc aatatgctaa tattgttaga ctgctacaga tgcactgaaa 120
cacagaatat gatctttaa ggggccaaaa atgctacggt gtgaaaatat cacaatgact 180
gtcttnccct taaaaaaagtc acataaaatg cagtttagaa caaggngaaa cataggtcta 240

<210> 209
<211> 147
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 209

aattcagggt atgnnnnngtg gntataaaagt acathttctgt agtgtgtgtg ctaccttagt 60
ttnatgttct ttatgaaaaa taaaaaacct cccccctccac aactttcctc ttgctttgaa 120
tataaggtaag atcataaacat ctatcta 147

SO_3170 US

<210> 210
<211> 67
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 210

aattcatgga aaacnnntat gttatTTTA atacataatg ttcaaaataa nnatatgtc 60

tactctta 67

<210> 211
<211> 41
<212> DNA
<213> Rattus norvegicus

<400> 211

aattcattct gttttttaa tctaactttt atatcaatct a 41

<210> 212
<211> 99
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 212

aattcatctc ctccngaaag caaaggtagt actattctt ttcacagatc aaattacaag 60

gggactaata gtgatgtaat ggnaccatg ccctgccta 99

<210> 213
<211> 141
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 213

aattccatgt ctatggnttc caagtcnnga gagaancacn nggatgactg ccaggaggac 60

ccaggtttcc agtgtgagag ctgaaancag gtccatccct gcttgcgtgt cancaaatta 120

ctcctcggtg ttctccctct a 141

<210> 214

SO_3170 US

<211> 134
<212> DNA
<213> Rattus norvegicus

<400> 214

aattcctcca ccatttaatt cagctccaaat caattttcaa tattgtctac actgttcct 60
gcaaaccat acccattaag atttatgact attcctcccta ccctgtttcg cttgctgtgc 120
cacgtgctaa tcta 134

<210> 215
<211> 121
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 215

aattccccga cccagagata tttgaccctg gccactttt agatggaaat ggaaagttta 60
agaaaagtga ctatttcatg cctttctcag cagaaaaacg gatgtnnncag ganagggtct 120
a 121

<210> 216
<211> 254
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 216

aattccgtaa agaaataata ttctccttca aaaagaggct ggcccgattc caccgaagga 60
aagagatgga aaaaaacaaa caaaccatcc tgaagtcagc ttctccatgt actgtcacaa 120
tgagagactc aattgcctcg tgagtgtggg ggagggagga aaaagggttc atacctgcct 180
cattaggaag agcagaacta tggtaagan cacagtggac tggatgttac actcantnnn 240
ccacttaata gcta 254

<210> 217
<211> 107
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 217

SO_3170 US

aattccgnnc cgaacaaggc cacangtgan ncttaactgga ntccatgctg ccatttttt 60
gtctgaaaat gtcagttactt aaaagtattt agnnaacact cgagcta 107

<210> 218
<211> 37
<212> DNA
<213> Rattus norvegicus

<400> 218

aattccttgg tattcggtat cagtaggaat ggggcta 37

<210> 219
<211> 291
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 219

aattcctgac cantgnnggt ctgganaaga ncccagagga gatccaacgc ctgttnccagg 60
anaagaaggt ggacntgtcc aagcccttgg taagccacat gcggctccgg tgtcacagcc 120
tgccacgtgg tcctggggc cttccctgt ggcaaaccgg atgtgcctgt ctacgatggc 180
tcctgggtgg agtggtacat gcgtgccaa ccggagcacg tcatntntca gggccgggggg 240
aagaccctgt gaangacaca gtgcagctt ggtgacacccg gaaccatcct a 291

<210> 220
<211> 289
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 220

aattcctgga aaaagacata tcagaggaan ttcttaataa aatcatctac cacacctcct 60
ttgatgtaat gaaggaaaac ccaatggcca actataaccac tctaccctcc agtatcatgg 120
accactctat atctccttc atgaggaaag ggtgcctgg agactggaa aactacttta 180
ctgtggcaca aagtggaggat tttgatgaag actaccggag gaagatggca gggagcaata 240
ttaccttccg cacagagatc tgagagcagt gaggnagagg gannccta 289

SO_3170 US

<210> 231
<211> 91
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 221

aattccaggc cagctnnntca antaagatcc tatcttaaag tanaatgaaa tagggttggg 60

gatttagcta cantgnnana gcacttgcct a 91

<210> 222
<211> 166
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 222

aattcccaaa acctnnnacg aagtctccgg antgagtcaa ctataccgt ttcttggcat 60

gagtccagag gcctccgact ccacagagan cagctcagtn ttctgtttt ctgcgtaca 120

cgtagaagag ctaagaaatg gagccggtn ncagaccncn ggacta 166

<210> 223
<211> 112
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 223

aattccagan tcagcaccaa nngacagacc attctaaaat gggcaaagga ctgaacggat 60

gntccggatt gacagtgacc acacagcccc tganganccc acaggaccac ta 112

<210> 224
<211> 65
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 224

aattcgtaaa gaggannctc acnntgaaaa cataaaactgc cacagtaagn ncacaaacct 60

gtcta 65

SO_3170 US

<210> 225
<211> 44
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 225

aattcgccaa qaqcqtttqa ntgacagctc tttgtgtatg t.ct.a

44

<210> 226
<211> 105
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 226

aattcgatgt gggnnccata naaagtangg aaaaatatgg gggttgtntga tggtaaaatg 60

cctctgtttg ccatcacnng cacagaaatg ancaagaatg tgcta 105

<210> 227
<211> 110
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 227

aattcgagac ccaanncacn aaccnaaacc cacaaccaca acagtaacna gaacaagaag 60

aaagaaaagca aaagggttgg gattnatgc agtggnagag cgcttgccct 110

<210> 228
<211> 392
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 228

aattcgggag tgnngnnccct tctgantctt gcancaaaga ggctnttcta tagcatgnnc 60

nangatgctg gcttgggttg aacnnatctc tggcatatct gatgangatg cangnccagg 120

atcccantgt ccangnatga nccagcaacc ctggaaacct acactcccc gaaaaaaacc 180

anaaaattgaa agaanancaa actaaaagga ngcnaaacac ataaagcatc antcacagtt 240

tgnnccagcc tngatctgac ntcgaanaag cctgaagaca gatgtgcccc ncttcanaca 300

SO_3170 US

cgtctggctt ctggcaccac ttgtgagctn cctgaaaagtc accannctcn tgctgtntcc 360
caanncaang nnatgagnnc ccnaacacac ta 392

<210> 229
<211> 81
<212> DNA
<213> Rattus norvegicus

<400> 229

aattcggaaag gactctccaa tgcgttcag ggagatatacg ccgctttcta tctaagaaca 60
tcattacttt aacaagtact a 81

<210> 230
<211> 203
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 230

aattctggac caagactctg ccccagaaga tccaagagct aaagggttct caggacaatc 60
acacagagct ataatgtcct gtgtcaagaa aactgtgttag acttgangta cagggtttct 120
gaaggctcta aagtctacac ttgaatggat atatcacatc tggtggatga ccctgcaatt 180
aagggttgaag tcgaccatgt cta 203

<210> 231
<211> 110
<212> DNA
<213> Rattus norvegicus

<400> 231

aattctgctc tgtgtatcct gatccaccaa gcagtcactt ggttagcagaa aagtggctt 60
atgtctgctc ttaactgtgg tggcgcttct gggactgtct tccagctcta 110

<210> 232
<211> 252
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 232

SO_3170 US

aattctggaa taagannctt gtttttaaaa aaggaactgc cgcaatctga aagacttcca 60
aagaangtta gagcacagta catactaccc ctgcccgtct cccaccaccc gctctccaca 120
accctcccccc atgtgcaact gacactcctc cccagtcgtat gctcctaccc acctttcagc 180
ccacgtcatt cgtagtgtcc atcttgtnaa gccctgttgtt gccacacagt ntaacnngcc 240
cccctgcagc ta 252

<210> 233
<211> 120
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 233

aattctgtgt gaaaancctc anaccacttc tcctgggncc tttaaactcc tggaggttta 60
gggaggccag ttccatccg cactgaattt gggagaanaa aactggnccc aattacgcta 120

<210> 234
<211> 47
<212> DNA
<213> Rattus norvegicus

<400> 234

aattctaagc cgagtttaac atgttcaaga tatctccgtt tcagcta 47

<210> 235
<211> 121
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 235

aattctccga cccggnnata tttgaccctg gccactttt agatggaat ggaaagtta 60
agaaaaagtga ctatttcatg cctttctcag cagaaaaacg gatgtgtncg ggagaggcct 120
a 121

<210> 236
<211> 65
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 236
aattcatcca caccaactgg acatgccac ggtggcagtg tgcgtccctc ttcatacaat 60
gccta 65

<210> 237
<211> 49
<212> DNA
<213> Rattus norvegicus

<400> 237
aattccctac acagaccaga actggctttt aactctacca ctacgtcta 49

<210> 238
<211> 48
<212> DNA
<213> Rattus norvegicus

<400> 238
aattccctgg gtgcctttct ttacaaaatg gttcaataa ataagcta 48

<210> 239
<211> 74
<212> DNA
<213> Rattus norvegicus

<400> 239
aattccatat gtaataggat gcaagtctaa gcgttcatg tggacataaa tgtatctaaa 60
taaaacttcc ccta 74

<210> 240
<211> 142
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 240
aattccaggc tgggnnttgcc tttctctgct ttcatgacct cttgacccca acgagctgat 60
gttaggacca caacactggt aggtggtaa aaaacaagca acaagggtg gggatttac 120
tcagtggtag agcgcttacc ta 142

SO_3170 US

<210> 241
<211> 184
<212> DNA
<213> Rattus norvegicus

<400> 241

aattccaaga gtgacttgtat ccctcccccct tctccaccga aaaccaccca aagtggggaaa 60
tgaatctctt caccagcacc cctctggcca caggcaaagt atgccacagg cctctgacat 120
actttggaca gactgccagc taacacccac caccccccattt ttaagacaca tctctggatc 180
ccta 184

<210> 242
<211> 71
<212> DNA
<213> Rattus norvegicus

<400> 242

aattcccaag gtc当地atgcgtttagctgtgtggacttcg atatgaaaca tgtaacctct 60
ccctttgcct a 71

<210> 243
<211> 391
<212> DNA
<213> Rattus norvegicus

<400> 243

aattccccata cacattggat taatcttact aacatgacaa aaaattgctc cactatcaat 60
tctataccaa ttttatcaac tcctaaagccc aactatcacc accattctcg caatttcattc 120
agtctttgtt ggcgcctgag gaggacttaa ccagacccaa acacgaaaaaa tcatagcata 180
ttcatcaatt gcccacatag gatgaataac agcaatcctt ccatacaacc ctaacttaac 240
cctccttaaac ttaacaattt acatcctact tactgttcca atattcatca cactcataac 300
aaactcagca acaacaatca acacactctc actcgcatga aataaaaactc ccataatcct 360
aaccatagca tccatcatcc tcctatcact a 391

<210> 244
<211> 175
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 244

aattcgccct gtcgggatga gagagtggga gactgagtaa ccatggctcc gccgtgcct 60
cactggctct tttccgtgta gcatctctgg gcaagtgagg gaggcatatt agtttccatt 120
tqcaqqtqtq qaacactqag ccccagaaag gacaagaaga ctcattcagt agcta 175

<210> 245

<211> 194

<212> DNA

<213> Rattus norvegicus

<400> 245

aattcgccaa ggatgactcc gatagcatga gccgaagaca gacttcttat tctaacaacc 60
ggagcccaac gaacagcact gggatgtgga aggactcgcc caaatcttcc aaatccatca 120
gattcattcc tgtctccact tgagccccac gttcacgcag cccgactctt gggagggact 180
tttgtgtcca gcta 194

<210> 246

<211> 44

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 246

aattcgggct ggggattag ctcagtggan aaacgcttgg ccta 44

<210> 247

<211> 198

<212> DNA

<213> Rattus norvegicus

<400> 247

aattctggag atgggacacg aggatcagtt caaggtcatc cttagctact cactgcata 60
taagtttag gtctgcctgt gctacatgag accgagggag agaaaggagg ggaaggagtc 120
aagcggtagt tgccttaat cgacgcattt gggaggcaga ggcaggtgga tctctcggtt 180
tgaggccagc ctggtcta 198

SO_3170 US

<210> 248
<211> 332
<212> DNA
<213> Rattus norvegicus

<400> 248

gatccgccac tccttctgca tacatgtcga tgagggctct ctccttcatg tccttccat 60
agaggttgta tttggtgca atgttagttga gaatggctct ggtctgcacc agttcatcc 120
catcaatctc caccatgggc acttgctgga acatcaaact cccatcattc cttagcctgg 180
ccaggtcatc ccgagtttc agaaattgtt cttcaaactc tactccagct gcagccagga 240
gccaccggat gggctccatt ctccccctgc catcgaagta gtgaaggact ggcttccccg 300
gcatggcagc aattgcttga gttctttgt ta 332

<210> 249
<211> 481
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 249

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gcacaaaagtg aggaagtggt cctgggaggg gcgggggcgg ggcagctccg agtcaggca 120
gtagggcact catggtacca tgagggtggc cagtctgcag gaggcatgga gtgaaggcca 180
gtgtctggctc cacttggaa gaaagggttt acagagcccc ggagtccgag gcagttggtc 240
tctgccancc atggcgtatc caagcctcct atccattccc cctgtacctc tggagatagc 300
ctgtccataa gatggctgtc ctgcctact gggccactt gaagaacaaa atgtcatttt 360
attctcttga gaaaagaaaa agagggaaatc atttttgcct ctgcttggat gcctagaagt 420
ctaataagcc tcattacaaa aagacgtttt ctgggtctca tctggcggtt tctttggctt 480
a 481

<210> 250
<211> 441
<212> DNA
<213> Rattus norvegicus

<400> 250

SO_3170 US

gatcctgtgg taggagtctt gaaatccccg ttgaactgct gagaggatac tccacactcc 60
accatcgact tccgttaggct tctcagcaac ttggaattgt tcttgatctt caggttttgt 120
gaccaccatg tgctgtgagag gagtgacaaa attgtacttg agtgacaagt tcagaacttg 180
ggcctcgagg gcctctaact cagctcctga ggctgaaatc ctctgctcca gctgttgctg 240
tatggtcagc aacgcccaga gtctctccat aaagttatga aagatgtact taggaccctg 300
gaactcttcc tcttgttggg ctatgctggc ctccgtttg aaagtgtatgt tctgcagggtg 360
catctgcccc ctgactttgg ctaagaggac atcagggccc tggtcccgga cttcccgagcc 420
accaccatct ctgagccctt a 441

<210> 251
<211> 193
<212> DNA
<213> Rattus norvegicus

<400> 251

gatccacaca accaaaccaa catgagtgaa agagtttagca acacggcctg tggttcgct 60
atgtttgggt gtcttggagc aaagctgcta tggagaaatg tgcaggtgcc taggggatgc 120
tgtactgctc tagaggatgt aactcaactc acagggtgac ttttgatgc ctgacccaat 180
tactagttga tta 193

<210> 252
<211> 156
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 252

gatcctggga ggatgttgac cacacccttg ggaatgccag cttcagtgt cagctcgca 60
aacttcaagg ntgtgagtgg ggtcacctgg gcaggcttga tcaccacggt gttcccgagcc 120
gccaggcagg ctgcacatttc caggatacca tcatta 156

<210> 253
<211> 101
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations

SO 3170 US

<400> 253

gatccgaacc caagaggtaa aaaccttccc gcgcgaccag aagtgtccga ggctttccccg 60
gaggcggtgtgg gacttacttt cccaagaana aagcaggatt a 101

<210> 254

<211> 228

<212> DNA

<213> Rattus norvegicus

<400> 254

gatctgcacc gtttgaagg aggaattcta ccacagctat ttgcccgtgt gccgcagccc 60
acatcagggg agtaaatcct tcttcatccg tgtgattgat aacatttct tggcaataac 120
gagtagccag gtagagcatc tctccctgag ctgccaactg gtgaacagac agagaatttg 180
ctaacaqaqq tqttqgtqqaq acctcggttc ccctgtqctt qttqqtta 228

<210> 255

<211>

<212> DNA

<213> Rattus norvegicus

<400> 255

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gatctttacg tgggtggctct ttaggttagtg gacttttatt tactccaaag ggcatttcattt 60  
caaaactctcc ccctcttggt gaaagttcag attccacagc aggtgctgat agtacaaccca 120  
tgtccatttc ataaacaatat gttaggatgtt tgatcttcaa gttgggtgaat gctgtta 177
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<210> 256

<211> 447

<212> DNA

<213> Rattus norvegicus

<400> 256

gatcttgggg tgggttagg gattccagg gtgaaggtag attatttatt agggtggaa 60
tgttcattt acatgaagag gaatatgcc aaaaaaaaaaaaaaaaatccctgaa 120
agaggaagttaatctgtaa tctggccata agttatgtga ctttcctcag aggatttctg 180
gggttacagg caggagtggc tgattggtca taacagtacc taattatcat atggtggaa 240
ggactgagtg ggatgtatgt gctgaacctt gtggcacttg caggaagtt tggcaaggc 300

SO_3170 US

cattctctag ataaggtag gcacttgtgc ttagaacact ttccagataa gattgggcaa 360
aggagaggaa accccactga gaaaggagt cttccattt gcaccagggtt cagagagtt 420
atctagacat ggtcgacttc aacctta 447

<210> 257
<211> 350
<212> DNA
<213> Rattus norvegicus

<400> 257

gatctaaaat acctcggaa tacatgtcaa tcagggctct ctccttcatg tccttccat 60
agaggtcata tttgggtggcg atgttagttga gaatggctct ggtctgtgcc agcttcatcc 120
cgtcaatctc caccatgggc acttggtcaa acatcaaatt cccgtcttcc tttagcttt 180
ccaagtcttc tggactctgt ataaacttct cttcaaactc cactcctgct gcagccagga 240
gccacccggat gcactccatt ctgccccggg cattgaagta gtgaagcact ggcttccag 300
acatagcagc aacttgctt tcactgtcta gcgagaatcg tggcttctta 350

<210> 258
<211> 155
<212> DNA
<213> Rattus norvegicus

<400> 258

gatcttcacc attggggttc ccagttcttg caaagttggc ccagttacttc atcaccctcc 60
tcttcagcag ctcttcctcc tcagttaggt caaaggtcat gccccacaag taggagccaa 120
agacaaaagag aatgtcatca ccatggtctg cctta 155

<210> 259
<211> 37
<212> DNA
<213> Rattus norvegicus

<400> 259

gatccgtacc ctaggtcaga gctgtatct ctgctta 37

<210> 360
<211> 40
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 260

gatcctggng atcagtgtgg ggctcacctc caatgggtta

40

<210> 261

<211> 224

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 261

gatcctatgg gctccgtgg cagctagcct agccagcata nggagctcca ggttcagtga 60

gaagacttgt ctcaaaaata agaggaaaaa agcaaatgag gttgtcacaa atgtgtactc 120

gtcatacataaa tgccatccat gcaaatgtat acacacacac actcacacac tcacacacac 180

acacacacac acanacanac acacacacnc ncnnatacc acca 224

<210> 262

<211> 31

<212> DNA

<213> Rattus norvegicus

<400> 262

gatcttgaaa agactgttgc cttcatgatt a 31

<210> 263

<211> 53

<212> DNA

<213> Rattus norvegicus

<400> 263

gatcttcgaa ctaaacgctg gggcgccccac ctccgaatcc caatttctaa tta 53

<210> 264

<211> 63

<212> DNA

<213> Rattus norvegicus

<400> 264

gatcctaact cattagtgtta aacgaccctc tccagcgtcc ctgcgccat ctttctgtcc 60

SO_3170 US

tta

63

<210> 265
<211> 105
<212> DNA
<213> Rattus norvegicus

<400> 265

gatcctattg aggcgagcag ggacctggct ggacaaggac acacttaaaa cccgatttg 60
ttccaaattc tggaaacat agacattaa ctctgaagat gccta 105

<210> 266
<211> 66
<212> DNA
<213> Rattus norvegicus

<400> 266

gatctaaagg accaaggcagt atgtcagtag ttgttaacgt agcagtagct gtctgtctgt 60
atgcta 66

<210> 267
<211> 137
<212> DNA
<213> Rattus norvegicus

<400> 267

gatcttggcc acaaaggcgc cccctggctt caagacatga gtagcaatgt taagggcgcc 60
aagcagaagc tgggcctgca tgtactcatc tacatcatgg aggccagtga catcaggagc 120
cccgtcacac actacta 137

<210> 268
<211> 197
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations

<400> 268

gatccagtc cctccagctc tgacntgcta ctgctcagcc aggctccata cctgacaggt 60
tgtttcttgg ctccctcttt gtcatctcac ttgtcctgcc ttctcctgac agtaacagct 120
gttcntcagg tcaactggat caggccccca tgtcctctaa ggagcaggaa gtcctcctac 180

SO_3170 US

ctaccctacc	cacccta	197				
<210>	269					
<211>	40					
<212>	DNA					
<213>	Rattus norvegicus					
<400>	269					
gatccgcctc	tcccaggagc	atcaagccta	ccgctggcta	40		
<210>	270					
<211>	109					
<212>	DNA					
<213>	Rattus norvegicus					
<400>	270					
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cagggtttca	cacatctcag	gattggccat	gaactcacta	tgccgccta	109	
<210>	271					
<211>	51					
<212>	DNA					
<213>	Rattus norvegicus					
<400>	271					
aattcacaag	gaaggagctt	agaacagaca	tctatttctt	actgattgtt	a	51
<210>	272					
<211>	36					
<212>	DNA					
<213>	Rattus norvegicus					
<400>	272					
aattctacag	aaccgtgttt	atgatacagc	cgttta	36		
<210>	273					
<211>	36					
<212>	DNA					
<213>	Rattus norvegicus					
<400>	273					
aattcagcct	tagaaaaaaaaa	taaaaattgct	gcctta	36		

SO_3170 US

<210> 274
<211> 67
<212> DNA
<213> Rattus norvegicus

<400> 274

gatccacttt tattaggaac aaatgcaatc tcaaatacgat acaattaggc ttcaagagtt 60
gatatta 67

<210> 275
<211> 287
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 275

ggcaatgaac cactgttagcg gggcttgca ttgctggctc tacctacagc tattactgg 60
cattggaaga ccttagagtc agaatttct tgtgttaagag ccctgaatgn tgtgaccaac 120
cccagtgtct acagcatctt tgcagctgtt aatctcaactg ttctcggtcc tattgaagaa 180
attactggcc cagaaatgcc tttgggtgtt tgccagact ttaaggcaca tgcgcaaaag 240
cagctgtcta agaccccttg ggacttattg aaggagaagc tgacgac 287

<210> 276
<211> 260
<212> DNA
<213> Rattus norvegicus

<400> 276

ggctccagct ggaagggttga atattgagtg tcctggagg tcacattgt gtcagacatg 60
gctgctggac atggcacgac acacggacat ggtcatggta aaatggaact tccagattac 120
agacagtggaa aatttggaa gacgcccattt gaagcaatgc agaagaagct tgctgcacga 180
gggctgaggg atccatgggc tcgcaatgag gcttggagat acatggcggtt cttgcagaca 240
atatcacctt cacgagcgta 260

<210> 277
<211> 299
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 277

ctacaacagc accagagaca ccattgtat agagtggac ttggtgtca gtccaacaaa 60
ctgaaggaga tggcccagtc gatcttcatg gcaggcatac tggttgagg acctgtgatt 120
ggagaactgt cagacaggtt tggccgcaag cctatcctga cctggagtt tctcatgctg 180
gcagccagcg gctctggtgc tgccttcagt cccagcctcc ctgtctatat gatcttccga 240
ttcctgtgtg gctgcagcat ctcggcatt totctgagca ccgttatctt gaatgtgga 299

<210> 278

<211> 139

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 278

gngagataacc atgatcacga aggtggttt cccagggcga ggcttatcca ttgcactccg 60
gatgtgctga cccctgcgat ttccccaaat gcgggaaact cgactgcata atttgtggta 120
gtgggggact gcgttcgcg 139

<210> 279

<211> 328

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 279

gatagactca ggaagcaatc atgggtctt ctgcagatga caaaaccaac atcaagaact 60
gctggggaa gattggccat ggtggtaat atggcgagga ggcctacag aggatgttcg 120
ctgccttccc caccaccaag acctacttct ctcacattga tgtaagcccc ggctctgcc 180
aggtcaaggc tcacggcaag aaggttgctg atgccttgc caaagctgca gaccacgtcg 240
aagacctgcc tggtgccctg tccactctga gcgactgcat gcccacaact gcgtgtggat 300
cctgtcantt cagttcctga gccatgtc 328

<210> 280

<211> 312

<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 280

ttacaaccca ggtgtggatg ctggagtgtt tcctttgtct tctatTTaa agatatctg 60
aaaaaaaaacct gtcactgtcc tttcctgcg accatgtctt ccatcaagat tgaatgtgtt 120
ttaagggaga actacaggtg tggggagtcg cctgtgtggg aggaggcatc aaagtgtctg 180
ctgttttag acatcccttc aaagactgtc tgccgatggg attcgatcag caatcgagtg 240
cagcgagttg gtgttagatgc cccagtcagt tcagtggcat tcgacagtca ggaggctatg 300
ttgccaccat gg 312

<210> 281

<211> 289

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 281

ccttgaacgg acatgacnct ganaagttag aaatgagctc agggacccgg agacccgcnt 60
cattctccct agcctgcntc tcttgccccg naacgcgggg ngcaggtttg ctcctaaaan 120
ctctgtgcat ctgcgtatgat aaggaccaac agctgggggt gtagctcagg gcagagtctt 180
gcctggnaag cccggatgcn ttgaggcctt gaccacccnc agcacanana naaaatgaag 240
gaagacccaa ggnaccttct ggaagacctc atccccaaan aagcaagtg 289

<210> 282

<211> 250

<212> DNA

<213> Rattus norvegicus

<400> 282

actgactgta ctggtcagga ggtcacagat ccagccaaat gcaacctgct ggcagaaaag 60
caatatggct tctgcaaggc gactctcatc cacagacttg gtggggaaaga ggtttcagtg 120
gcctgcgcct gtagccccac cagctggccc acctgaatcc gtgggtggtag gaccctgtggc 180
agttcctcta ggacttccag accacccgaac ccaccatgac ctacggcatg cttctctcc 240
tgtggcttct 250

SO_3170 US

<210> 283
<211> 285
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 283

agccactgtn gccgatctcg cgcaacgcnna ctgtctgtn tngcacgtag tcccccatcg 60
tgcannaanc ggtcncaaaa gattcnaann caagatggna gcccnncnacg aacaggncat 120
tgtgaatgtn cttaaggaag aacaggtntcc ccanaacaan atnaaagttg ttgggggtgg 180
tgtgntggca ngggttgtgc catcagnanc tcaangaang actgggtgat gagntgccc 240
ttgttgatgn cacacaagan aanctaaacn gagagangan cgatc 285

<210> 284
<211> 266
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 284

gaccctgtnt ccaggagcca acagcttagac tggtcccagt cagacgnagg aaacctggnc 60
cagctttgc actttcnang tgacgatggn cntacagagg acccaatcct tgcttctgct 120
ctgttgctga ccctgctggg gttagggttg tacagccctc ctatggccaa gatagaatgt 180
accaacggtt ccttagacag catgtggacc ctgaggggac aggccgcagg acaactactg 240
caacgtgatg atgcagagac ggaggt 266

<210> 285
<211> 250
<212> DNA
<213> Rattus norvegicus

<400> 285

gtagctttcc cctttgctg gcacagaagt ctgtccatct gcaagcgctt tggaacacag 60
actgcctgga gccacaccttcc tttggagac cttcctgcct cagctgtcgt cctgtgtcgt 120
cattcactaa agtcctgac gtcagattaa gcaaggcgtg atgggttaca ttagagacaa 180
gccgcagaga taaggcctgt tgctgtttcg cagataatga tgagtttaa ttacccactg 240
gtttgtatgg 250

SO_3170 US

<210> 286
<211> 118
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 286

gtangactng catcggaag ggctacagag gaaccatgtn caagacaaag actggtgtta 60
ccnnntncaat agtggagtga gcacgtgccc cccacgtagc ccaaananctc ccccaggc 118

<210> 287
<211> 262
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 287

gagagnacct ttgtctcgga gtaactcccg taccckaagt cctaaaagcc ttccgtctta 60
cctcaatggg gtcatgcctc caacacagag ctttgcccc gaccckaagt atgtcagcag 120
caaagccctg cagaganaga gcagcgaagg gtctgccaag gccccctgca tcctgcccatt 180
ncattgagaa tgggaagaag gtcagctcca gcnttattca cctactacct gagcggacgg 240
cancaccttg ncaaataatga gc 262

<210> 288
<211> 282
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 288

tgagctgcnc ctgacatttg tccatctccc aaannctctc tggagcancc ntngaagtcc 60
ctngtcctgc tcctttnnnt tgctcagatt ctagagctgc caatcagctc cacaagggtgc 120
agggctgggt tttcgagaat tggcttnat gacccggaaa aaaancntt nanctttgat 180
agccgtggac tacctaata aacatcttct tcaggattc aggcagatct tgaatcagat 240
gacaaagtaa ggtgtggctc cggcggccct tcgganaggt gt 282

<210> 289

SO_3170 US

<211> 265
<212> DNA
<213> Rattus norvegicus

<400> 289

catagaccca tctctcagct gggatgatat taaatggctc agacggttga cctcaactgcc 60
cattgttgta aaggaaattt tgagaggtga tgatgcccaag gaagctgtta aacatggtgt 120
ggatgggatc ttagtgtcga atcatggggc acgacaactg gatggggtgc cagctactat 180
tgatgccctg ccagagatcg ttgaggctgt ggaagggaag gtagaagtct tcctggatgg 240
gggagtcagg aaaggcacccg atgtt 265

<210> 290
<211> 199
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 290

ccctgcaagc tgtgttgcag ggccoggaag gtcactgtt ccgaaatggc cgacagtcag 60
acaaggatgt gagatacact ctggagagat cagagacaag cacaganact gtgtcnact 120
agtgncttg cagtctnaac atctgtggag atcnanncan tggtnnntna ctggcnccan 180
ncgtncnatg caaannacg 199

<210> 291
<211> 285
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 291

tacgcaccat ggacacangc acangcctca tcaganctat gcatacgatgt ntaaaatcana 60
agtgtgatct tttcaacta cagttatggc gaagcaactc attggccagn ttctgggaga 120
ntttgtgnng tanttaatgc agcngtatgg naacnnaata cnatttangt ttcnngtgct 180
gntantaatg gtcnatgcct tctacagtgg gttgtccann nggantactt ccancgnnat 240
aggngntgga gntatgttc tcgcccataat ganggttgcn gngta 285

<210> 292

SO_3170 US

<211> 268
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 292

ccacgctgga gogaanacca ttgctcgtga gcacatgggg agactgctgc accagctact 60
ctgcgcaggc cacctctcta ctgtccagta ctaccaaggg ctgtatgaaa cactagaatt 120
ggctgaggac atggaaatcg acatccctca tgtatggctt tacctggcag aactgataac 180
acctattctt caggaagacg gggtacccat gggagagctc ttttagggaaa ttacgaagcc 240
tctgagaccc atgggcaaag ccacttct 268

<210> 293
<211> 185
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 293

ctcattgcca ccatgaactt ctccggcaag taccaagtgc agagccaaga gaactttgag 60
cccttcatga agggcgatgg gtctgctgag gacttcatcc nagaaaggga aggacntcaa 120
gggggtntnn gaatncngcn nnnanggaag aaantnnaac tcnccatcan ctannggncc 180
aangt 185

<210> 294
<211> 286
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 294

agctaagtag aaaaatatgt gtgaataaag ccaataatat ctcccanatg ttattaccaa 60
ttaataagat gttctatccc ctggtatgtat ataaaaattat ctctacttaa tgtcataact 120
ggcaaaaaaaaaa aaactatcat tgcaaattgcc tccccagtgaa accaataact tctcanatat 180
ttagaattat tggttataac tcactaacct agtttcctaa natcantta anatttgatt 240
tatngtanag cantggnnaa tgatgccnct ctnatgttgtt tttnnac 286

SO_3170 US

<210> 295

<211> 225

<212> DNA

<213> Rattus norvegicus

<400> 295

gcctccggc ttgcctgcc agtttatcc ctagaaggcag ctagtactc caggtgcaca 60

ggtgccatgc agccccgaat gtcctcatc gtggccctcg tggctctcct ggcctctgcc 120

cgagctgatg agggagaggg atccttgctg ctgggctcta tgcagggctta catggaacaa 180

gcctccaaga cggtccagga tgcactaagc agcatgcagg agtct 225

<210> 296

<211> 278

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 296

acaccatcna cctgtatgcn gtnactggcc gtgnngacat tccagccagc agcaagccat 60

nttccatcaa ntatcanaca naaattgaca agccatccca natgcangtg acggntgtcc 120

aggacaacag catcagtgtc aggtggctgc cttcaattct nctgtggaca ggtaccgagg 180

nccagcggtt ccncaaaaant gggtaactgac naacanaatc tcaaactgtc nagtccagat 240

canacagaga tgnccattga aggntgcaac ccaccgtg 278

<210> 297

<211> 290

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 297

gtggaaagga aacctcattg ccaccatgaa cttctccggc aagtaccaag tgcagagcca 60

agagaagtgc gaggtggana ggaaacctca ttgccaccat gaacttctcc ggcaagtacc 120

aagtgcagag ccaagagaac tttgagccct tcatgaagn nannggnctg nctnaggnc 180

tcatncngaa anggangnc atcaaggggg tgtaagtat nctgcatgan ggganctcnt 240

caaatacatacna ncactatgng tncaagtat cnaatgagtt cacttggggc 290

SO_3170 US

<210> 298
<211> 296
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 298

agcaaggcta ttctgtactg gnctgtgtc cagaatctag accactggca gtgggtgaca 60
gcccgagtta ggttaatcga agtctcgtcg caggctctgc tgtaagtctg gcctcttggc 120
ctcacatctt ctttgtggta tccttccta tctccagctt cctcagctgg tcagggagat 180
ttggtccaga actagaagcc ttaataatct gagcaggtaa gagaggagta aaatgtacag 240
tcttgacat tgactaaagg gtcctgcaga ggatatcaag gtaagtggct tggagg 296

<210> 299
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 299

ggtggccctg cttgtcttg gctctgtct ctggcttgaa gacctctggc tttccaagga 60
gtccccctccg gctgtttggg aaacggagcc ttccagaagg ggtgggtggat gcattgagat 120
ctacagcacc aagatcagct gcaaggtgac ctcccgctt gtcacaatg ttgtcaccac 180
aagggtgtc aaccgtgcag acaaggccaa gaagtttcct ttgatgtgga ctgcccaga 240
cagcctncat caccaacttc accttgatata ngatggg 277

<210> 300
<211> 287
<212> DNA
<213> Rattus norvegicus

<400> 300

ctcagttct gaagagaagc accctggcac agttttctg agttttggac ctaggtctac 60
aaccatgaag gtagcaatta tctttttct cagtggctt ggccctgctc aattttagcag 120
gtaacactac agctaagggtg attggaaaa aggctaattg ccctaataca cttgttgat 180
gccccagggta ttatgtatcct gtgtgtggta ctgacggaaa aacttacgcc aatgaatgca 240
ttctatgctt tgaaaacagg aaatttggaa catctatccg cattcag 287

SO_3170 US

<210> 301
<211> 85
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 301

tttcttctga cgctaggnaa cattccagtg tagctgaggc tgtcccaaac ccagtgaggn 60
gcccaggatg ttccctgaaag ggctg 85

<210> 302
<211> 295
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 302

gcgacacagg tgaaccatnt cttnctgacgc taggaaacat ccagtgttagc tgaggctg 60
ccaaccagg gaggagccca ggatgtncn gaaggctgtg gtgctgaccg tggccctgg 120
ggccatcacc gggaccagg ctgaggtcac ttccgacccng gtggccaatg tcatgtgg 180
ctacttcacc cagcnaagca acaatgccaa ggaggctgtg gaacaactgc agaagacaga 240
tgtcaactcaa cagctcaata ccctttcca ggacaaactt ggaacattaa cacct 295

<210> 303
<211> 279
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 303

cttcatctct ctggggccca catggggcggttccatcaag cccatgcggtaacctggc 60
aggtgacaac cagggcatcc cgatcatgtc caacataaag ctgagagaag aacagcgcat 120
aaccacaact tcaccctggta tgttccagtc tcaccacgtg tggcctgaag accacgttt 180
catttccaca ccaaacttca cnacacaggc caagacttcg agcgaaaaat tgcagatctt 240
cattttgaag aaggctggca catgtttcta cagtcgt 279

<210> 304

SO_3170 US

<211> 306

<212> DNA

<213> Rattus norvegicus

<400> 304

cttggagtc ctcggctgct tacaacttgg agccacctgt gtcctggccc ccaagttctc 60
tgcttcccga tactgggctg agtgcggca gtacagtgtg acagtggtcc tgtatgtggg 120
tgaagtccctg cgataacttgt gtaatgtccc agggcaacca gaagacaaga aacatacagt 180
gcgggttcgca ttgggcaatg gacttcgggc agacgtgtgg gaaaacttcc agcaacgatt 240
tggtcccatt cagatctggg aactctacgg ctccacagag ggcaacgtgg gcttaatgaa 300
tatggg 306

<210> 305

<211> 296

<212> DNA

<213> Rattus norvegicus

<400> 305

gggtttctct gtatttaccc ctacaagatc cctggatggt gtctctgggt tcttccaagg 60
ggccttcctg ctcagtctat ttctggtgct gttcaaggca gtccaattct acttacgaag 120
gcaatggctg ctcaaggccc tcgagaagtt cccatccacg cttccact ggctttgggg 180
ccacgacctg aaggacagag aattccagca gtttcttacg tggtagaga aattcccagg 240
tgcctgctta cagtggctct cagggagcaa aacacgagtc ctgctctatg accctg 296

<210> 306

<211> 147

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 306

tcaagttcggt tgcntcccat gagnntcccc tgcaatcagn aactatgctt tccctgaggg 60
tcncctgctt catcctnagc ttggccagca cagtctggac tgcagacacc ggcaccacaa 120
ttgaattcat anaaggcagga ggnnata 147

<210> 307

<211> 312

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 307

gcatccgcta agtgcgtggt gcgaactgnc gctgggtgcg gttgtcgccg tcgccactgc 60
ctctcggtcc aatgagctgc accaggatga tccacgtgct ggatccacga cctttgacaa 120
gttcagtcat gcccggtggac atggccatga ggatttgctt ggcacattca ccacccctga 180
agagttcctt gggtccttac aatggtcttc agcgaagaca ttttgtaat aaaccgaagc 240
ccttcaaacc gtgtctcagc gtcaagcagg aagccaaatc acagaaggaa tggaagagcc 300
cacacagcca ag 312

<210> 308
<211> 284
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 308

gtcagttca ctgtggaggt cctgcttcca gacaaagcag cagaagagaa gttgaatcag 60
cagggggcag tcaccccaa ataacatctc ctcctgcag caggcctggc ccccctcagt 120
gtttcctgt cagttcttt atagtcattt tcctacaacc tattagccca aagaaaactgg 180
gctggaggg aagacttcaga ctggacggag cacccgttca gagtcagaag cggtataanta 240
gctagagggg tcctccncat cagaatacta aagggtctcc agag 284

<210> 309
<211> 293
<212> DNA
<213> Rattus norvegicus

<400> 309

gtagccactc taactagggg cgtgctgaga caagaccacc tcattcctct gctgctttc 60
agacaggact gtcctgccga cccaccatga tccaggctgc actgttcctt ggctgtatct 120
tactgtcctc ggtgaccgccc ttccatgga agactcagga tggtggcctg ccccatcagc 180
cagctggcac agaaaactgag cctacacaac tgctctacag caagagtctt cctccgaccc 240
ccagtacctg tcggaacctc ctaagcatgg cgccccctgcc ccctgttagtc ctc 293

SO_3170 US

<210> 310
<211> 208
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 310

gtccctgang cctacaccat cctgcgttag agatgccgt ctcatttga ctcagagtct 60
gtccctctgc ttgtcttctn caagccatnt ggctctacct gctggcactg gtgggcctgt 120
ggaacctcct gcgcttgttc agggagngga nnntggtnag cnatctccaa gacaagtatg 180
tcttcatcac gggctgtgat caggcttt 208

<210> 311
<211> 280
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 311

ggctgtaatg gggctgcctg gctcccttg gcagtgggtg ctgttgctgt tggggctact 60
gctccctctt gcccacnnct tctggctctt caatgtgttc ttccccccgc acaccacgcc 120
caaggctgaa ctcagtaacc acacacggcc tgtcatcctc gtgcctggct gcatggggaa 180
ccggctagaa gccaaagcttg ataaacccaaa tgtggtaaac tggctgtgct accgaaanac 240
agaggatttt ttaccacnngn ctggattcan anntttcnnc 280

<210> 312
<211> 181
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 312

ctggaacact ttaattctgt ccacaagggc agagtgnacn aactcccagc aatctaggac 60
tncaaccttt agcctttagc ctcactcctg agggttatgg tgatcaattt tcctggatct 120
gaagacttgg acatggactg agacctcagt tacagacagc ctgttgtgag acttctcagc 180

c

181

SO_3170 US

<210> 313
<211> 174
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 313

cacnaagcta tntataatgg ccagactata cttggtttga aggaataacct tttcatgcct 60
ttgggattgc cnaaganaac ttgc当地 gtttgtaata aagtttgtgg tgaaanacga 120
agatttgatt tcattggctt atcccaagtc aggaacgacg cgccggctcg naat 174

<210> 314
<211> 289
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 314

atttttgttt acccactcga gaagtaagcg ccaaaggggc tagtaagaga acagacagcg 60
ctgggttgtt ctatttgctc caggcctaac cagtgggaa gtggatttgc gggacacgtg 120
tctcagcctg gacacttagg ggttcttagc ttgtgaagcc aatccnggtg gaaccgatgt 180
ggatnaggnt gcantgnnc tctgtttccc cccaaacttc cccagtaacc tttgggcaag 240
gtggatgaac ncagngattt ttgaaaagtc aaaaacttcg gtttgttta 289

<210> 315
<211> 309
<212> DNA
<213> Rattus norvegicus

<400> 315

gcccagtgtt ctagggacca tgccatggag gacccagaca agaaaggggg agccagagcc 60
gggagcgaag tagggtctgc cagccccgag gagcaacttg acggatcagc cagccagtg 120
gagatgcagg atgagggatc agaggagctt cacgagacag gagagccctt gcccccccttc 180
ctgctgaagg aggggtggaga tgaggggcta cactcggcag agcaggatgc cgatgtatgag 240
gcagctgatg atacagatga caccagctcg gtgacccctt ctgccagtct accacccctt 300
ctcagagtg 309

SO_3170 US

<210> 316
<211> 211
<212> DNA
<213> Rattus norvegicus

<400> 316

cagacotcca ggagaacctg gaagaagtcc ttcccaagct gctagctgag aacattcgat 60
gcttctacct tggccacagc tcaccactc cgggcgtaga ggctctagga gctgccctgg 120
acgctgcacc ttctgaccca gtgcctgcca agcttcgtgc taatataaaag tggaaatccc 180
cagccatatt catctatact tcagggacca c 211

<210> 317
<211> 282
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 317

agccggcagc cgagtcggat tgngctgctg cagacgccag gccactccag ccagcactgc 60
cgttttcacg ccccggtgc agacagctag gaggcttat ctagttgaa ccaggctgct 120
ggagctcgct ccttccctct cttttttcc acgaggctgt ttttttattt ggctgcattgc 180
atgaaatccc aatggtgttag accagtggcg atggatctag gagtttacca actgagacat 240
ttttcaattt ctttcttgtc gtcttgctg ggaatgaaaa cg 282

<210> 318
<211> 261
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 318

aaggagaga aatcaatgaa tttcaatct tgttttta atgaggcagt gatattatag 60
catggtaaaa ctgcttaat ttacacttt gattgggtgc tgggaataa acctaaagca 120
tggcatatta atgaagaaca tatggtaacc atgaactcca tctctggatt ctttatcgg 180
cnattttta aagggttaat attcgacca gagaatgaca agtggtttg acaacatact 240
ctaggccttc tattaaaaac a 261

SO_3170 US

<210> 319
<211> 273
<212> DNA
<213> Rattus norvegicus

<400> 319

cgtggttaca ccaggaccat ggagccagt atcttgctcc tccttgctct cctcggtggc 60
ttcttgttac tcttagtcag gggacaccca aagtcccgtg gcaacttccc accaggacct 120
cgtcccccttc ccctcttggg gaacccctcg cagttggaca gagggggcct cctcaattcc 180
ttcatgcagc ttcgagaaaa atatggagat gtgttcacag tacacctggg accaaggcct 240
gtggtcatgc tatgtggac agacaccata aag 273

<210> 320
<211> 205
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 320

ccaggaccat ggagccagt atcttgctcc tccttgctct ccttggtggt tcttgttact 60
cttagtcagg ggacaccnaa attccntggg aaatttccna caagnacttg nncccttcc 120
cntntngggg aacncntgaa ntggaaana ggaggcntcc tnantncntt cangnagttt 180
cgcgaaaaat atgganatgt ntnca 205

<210> 321
<211> 289
<212> DNA
<213> Rattus norvegicus

<400> 321

caccaggacc atggagccca gtatcttgct ctccttgct ctcccttggt gcttcttggt 60
actcttagtc aggggacacc caaagtcccg tggcaacttc ccaccaggac ctcgtccct 120
tcccctcttg gggAACCTCC tgcagttggc cagaggaggc ctcctcaatt cttcatgca 180
gtttcgcgaa aaatatggag atgtgttcac agtacacactg ggaccaaggc ctgtggtcat 240
gctatgtggg acagacacca taaaggaggc tctggtggc caagctgaa 289

SO_3170 US

<210> 322
<211> 265
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 322

gccatTTggc tcccaaggac attgacGtca cGCCcaaggA gagTggcatt ggaaaaatac 60
ctccaaAcgtA ccagatCTgc ttctcagCtc ggtgatCCgg ctgaggcAGc catgtGcccc 120
agttctgttg ggaatggcct catgttCtg cctctgggg acctgctgaa aaccaggcTC 180
aaggccactg ctcacatCtt cctattgcag ttctccaaAg tcccaaggct tttcntatt 240
cctgtGAATg gcactgaaga agtca 265

<210> 323
<211> 234
<212> DNA
<213> Rattus norvegicus

<400> 323

gtaaaatGCC atacactgat gcagttaTcc atgagattca gaggtttca gatcttgcc 60
ctattggagt accacacaga gtcaccaaag acaccatgtt ccgagggtac ctgcttccc 120
agaacactga agtgtacccc atcctgagtt cagctctcca tgaccacag tactttgacc 180
acccagacag cttcaatcct gaacacttcc tggatGCCa tgggcactg aaaa 234

<210> 324
<211> 235
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 324

gaaacttggT cattctagca gcacagantc agaactgaga actggccatg gcacggaaac 60
aaccacatag ctggctgaan gctgtgctct ttgggctcct gcttattctt atccatgtgt 120
ggggTcagga ctcaccagag tccagctcca tcaggaccac acaanatann attnanaaaan 180
gnaagcttga cnacgtgagg gacactaaag ctggtgtcca nacaacanaa ngttc 235

<210> 325
<211> 263

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 325

aaagtcccaa ggnttggct tattcctgtg aatggcactg aagaagtcaa tcgactgtct 60
tattttgaca tgtgaacaga gatttcatga gtacacatct catgtgagt cacttcctc 120
ttcctcctaa tagcccacgt ccccacttat cagccctcca tggctgtga tctgtgctaa 180
tggactctgt atatggtctc agtgcatagt ctacagactt acatagtagt tatggttcag 240
gtaaacagat cacagagtgt gtg 263

<210> 326
<211> 300
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 326

gtgcagaaaag actgaaggag ccagaaanta tcaatgccag ggaaactgtc ttcgagaccc 60
aacaggaact gatacacgag ccaaaccagc aatgtcttcc cctgcacagc ctgcagttcc 120
tgccccactg gccaaacttga agattcaaca caccaagatc ttnataaaca atgaatggca 180
tgattcagtg atggcaagna attacctgtc cttaaccctg caatgaggag gtcatctgac 240
atgtggaaga agggacaagg cagatgttga caagctgtga agccgcaaga caggcttcc 300

<210> 327
<211> 350
<212> DNA
<213> Rattus norvegicus

<400> 327
acacagatga gtactgttgc accattccta tggctatggg cactgctcaa 60
ataataaagg agctatccag agagaacctg caggctgtc taaaggatac agcagcacaa 120
atgatgcttc ctccctgagtg tggtgacctg ctcatggaaag agtacatggg gaacactgtat 180
gattcccaaga ccctacaaat acagtacaca gagatgtgg gagacttctt gtttgtatc 240
cctgcactcc aagtagcaca ctttcagcgt tcccatgccc ctgtctactt ctatgagttc 300
caacatgcac ccagctattc aagaatgtca ggccacccca gtgaagggtga 350

SO_3170 US

<210> 328
<211> 258
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 328

agantgtnga gcgagcnaag naatatgtcc ttggananc tctgnnccaa gnaatanatc 60
agggccctca gattnacaag gagcaacatg ataaaatcct tgatctcant gagagtggga 120
agaangaagg agccaanctn gagtgtggtn taggacgcng ggggnacaaa ggcttcnttg 180
tccanccnn agtcatctcc aatgtgacng atgagatgng catnccnaa gagngatat 240
ttggancagn gcaacaaa 258

<210> 329
<211> 245
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 329

gaaatgatgt ggccaggttc atcaactgg tggaggnaga atttaactac cccctagaca 60
atgtccacct cttagggtac agtctggag cccatgctgc tggcgtggca ggaagtctga 120
ccaaacagaag gtcaatagaa ttactggctt ggatccagct gggcctaact ttgagtatgc 180
agaagcccct agtcgcctt ctcctgatga tgcggatttc gtagatgtct tacacacatt 240
tacca 245

<210> 330
<211> 191
<212> DNA
<213> Rattus norvegicus

<400> 330

gattatttgt agccaccatg agagactttg ggataggaaa gcagagtgt gaggatcaga 60
taaaggagga ggccaaatgt ttagtggagg aactgaagaa tcatacgga gtctccctgg 120
acccaacgtt cctcttccag tgcgtcacag gcaacataat ctgctccatt gtctttggag 180
agcgctttga c 191

SO_3170 US

<210> 331
<211> 265
<212> DNA
<213> Rattus norvegicus

<400> 331

aggaagccct gcagagcata agaggcccag ctagagggac aacacagagg agtaatttgc 60
tgacagacct gcagggatgg acctgcttc agctctcaca ctggaaacct gggtcctcct 120
ggcagtcgtc ctggtgctcc tctacggatt tgggaccgc acacatggac ttttcaagaa 180
acaggggatt cctgggccc aacctctgcc ttttttggc actgtgctga attactatat 240
gggttatgg aaattcgatg tggag 265

<210> 332
<211> 296
<212> DNA
<213> Rattus norvegicus

<400> 332

gactgctgga accaacgtcc tctcttaccc tccaccttct tctgtcacct ctaccacggt 60
caccatgtcg caagccggc ctgccactgt gctgggtgcc atggagatgg gtcgcccgt 120
ggatgtgacc tccagctccg cgtcggtgcg cgccttcctg cagcgggcc acacggagat 180
agacaccgccc ttctgtatg cgaacggtca gtctgagacc atcctaggag acctggggct 240
cggactgggc cgcaaggct gcaaagtaaa aattgccacc aaggctgccc caatgt 296

<210> 333
<211> 214
<212> DNA
<213> Rattus norvegicus

<400> 333

gagatgttcc ctgtcatcga acagtatgga gacattttgg taaaatactt gaggcaagag 60
aaaggcaaac ctgtccctgt gaaagaagtg ttgggtgcct acagcatgga tgtgatcacc 120
agcacatcat ttggagtgaa tggtgattcc ctcaacaacc cgaaggatcc ttttgtggag 180
aaagccaaga agctcttaag aattgatttt ttg 214

<210> 334

SO_3170 US

<211> 183
<212> DNA
<213> Rattus norvegicus

<400> 334

ggcagcattg atccttatgt atatctgcc tttggaaatg gacccaggaa ctgcattggc 60
atgagggttg ctctcatgaa tatgaaaactc gctctcacta aagttctgca aaacttctcc 120
ttccagcctt gtaaggaaac acagataacct ctgaaattaa gcagacaagg acttcttcaa 180
cca 183

<210> 335
<211> 174
<212> DNA
<213> Rattus norvegicus

<400> 335

attggcacca aggagggaaat cctgcagtac tgccaagagg tctaccctga actgcagatc 60
acaaacgtgg tggaaagccaa ccagccagtg accatccaga actggtgcaa gcggggccgc 120
aagcagtgca agacgcacac ccacatcgatg attcttacccg gtgccttagtt ggtg 174

<210> 336
<211> 241
<212> DNA
<213> Rattus norvegicus

<400> 336

atttgggcat ggggaaaagg aacattgagg atcgtgttca agaggaagca cggtgccttg 60
tggaggaact gagaaaaacc aatggctcac cctgtgaccc cacgttatac ctgggctgtg 120
ctccttgcaa tgtcatctgc tccattattt tccagaatcg ttttgattat aaagatcagg 180
attttcttaa cttgatggaa aaactcaatg agaacatgaa gattttgagc agtccctgga 240
c 241

<210> 337
<211> 289
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 337

SO_3170 US

atgaaggctt ttgtccccac tggctttca gccttcctt ccgagctact gcatccccca 60
gaaaaagtgg gtgaaggctca agtaccccaa actcatctcc tattcctaca tggAACGTGG 120
ggccacttt gctgccttg aagagccaa gcttcggcc aggacatccg caagttcg 180
tccctggctg agctgnagta ntnacggntt annaaantgt ggctttagna naancctgg 240
tccccanagn aannttgggn aaccccccctn gggaaaaant tntcccccc 289

<210> 338
<211> 243
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 338

tgggcagaaa ggaagccctg cagagcatca gangcccagc tagagggaca acacagagga 60
gtaatttgc gacagacctg cagggatgga cctgcttca gcttcacac tggAAACCTG 120
ggtcctcctg gcagtcgtcc tgggtgcctt ctacggattt gggaccggca cacatggact 180
tttcaagaaa caggggattt cttggccaa acctctgcct tttttggca ctgtgctgaa 240
tta 243

<210> 339
<211> 289
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 339

gcagaaagga agccctgcag agcatcagag gcccagnac agggacaaca cagaggagta 60
atttgctgaa cagacctgca gggatggacc tgcttcagc tctcacactg gaaacctggg 120
tcctcctggc agtcgtcctg gtgctcctt acggatttgg gacccgcaca catggacttt 180
ncaagaaaaca ggggatttgcct gggccaaac ctctgcctt ntggcatg tgctgaattt 240
ctatatgggt ttatggaaat tcgatgtgga gtgccataaa aagtatgga 289

<210> 340
<211> 289
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 340

attnaagggtg atcttatctca tcagaaatcc cagagatgtt cttgtttctg gttattat 60
ctggggtaag acaactcttg cgaagaagcc agactcactg ggaacgtatg ttgaatgg 120
cctcaaagga aatgttccgt atggatcatg gttttagcac atccgtgcct ggctgtct 180
gcgagaatta gacaacttct tgttactgta ctatgaagac ataaaaagg atacaatgg 240
aaccataaag aagatatgtg acttcctggg gaaaaaatta gagccagat 289

<210> 341

<211> 278

<212> DNA

<213> Rattus norvegicus

<400> 341

atgaaataacc tggatatggt gttgaatgaa accctcagat tgtatccat tggtaataga 60
cttgagagag tctgtaaaaa agatgttgaa atcaatggtg tgtttatgcc caaagggtca 120
gtggtcatga ttccatctta tgctttcac cgtgatccac agcactggcc agagcctgag 180
gaatttcgcc cagaaagggtt cagcaaggag aacaaggcca gcattgatcc ttatgtatat 240
ctgccctttg gaaatggacc caggaactgc attggcat 278

<210> 342

<211> 312

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 342

cggtcggta cggagagcgc aggttgtatc accaacatgg gggactctca cgaagacacc 60
agtgcacca tgcctgangc cgtggctgaa gaagtgtctc tattcagcac gacggacatg 120
gttctgttt ctctcatcgt ggggtcctg acctactgtt tcatttttag aaagaagaaa 180
gaagagatac cggagttcag caagatccaa acaacggccc caccgtcaa agagagcgc 240
ttcgtggaaa agatgaagaa aacggaaagg aacattatcg tattctatgg ctcccagacg 300
gqaaccgctg ag 312

<210> 343

SO_3170 US

<211> 287
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 343

agcttagtgag gcctctgggg ctgcgaccta cctcgagag gggtttgcac taaggcgctg 60
ggcgccgtga ctccgggcgc tgtggaccat ggctccgccc caggcgccca acagggacgg 120
tgcangccag gaggatgagg accgttggga acacgggggg accgcaaggc ccggaagccc 180
ctggtgaga agaagcgacg cgcgccgatc aacgagagtc ttcaggagtt gcggctgctg 240
ctagcgggca cggngtgcag gccaaagctag agaacgccga ggtgctg 287

<210> 344
<211> 232
<212> DNA
<213> Rattus norvegicus

<400> 344

cattcttgac cagtaccaca ttttgagcc caagtgcctg gacgccttcc caaacctgaa 60
ggacttcctg gcccgccttg agggcctgaa gaagatctt gcctacatga attgcagccg 120
ctacctctca acacctataat ttcaagtt ggcccaatgg agtaacaagt aggcccttgc 180
tacactggca ctcacagaga ggacctgtcc acattggatc ctgcaggcac cc 232

<210> 345
<211> 223
<212> DNA
<213> Rattus norvegicus

<400> 345

tgtctgcaag cacaacattg aatcagtaac agttgtcagg gttggtgact gcccattggaa 60
tggatctttt attcatgagc aattcagccc caaatgaat ttggaaaact tttgcctgaa 120
gtacttattt aaatacaatc aagagacctg ctgaatattt tgatgcgttc tcaaaagtgt 180
atggtcctgt atttactctt tactttggca tgaagccac tgt 223

<210> 346
<211> 278
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 346

atggagtaac aagttaggccc ttgctacact ggcaactcaca gagaggacct gtccacattg 60
gatcctgcag gcaccctggc cttctgcact gtggttctct ctcccttcctg ctcccttctc 120
cagcttgtc agccccatct cctcaacctc acccccagtca tgcccacata gtcttcattc 180
tccccacttt ctttcatagt ggncccttc tttattgaca ccttaacaca acctcacagt 240
cctttctgt gattgaggtc tgccctgaac tcagtctc 278

<210> 347
<211> 295
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 347

gcggggccgtg ggtgatctgg tcggtaacgg agagcgcagg ttgtatcacc aacatggggg 60
actctcacga agacaccagt gccaccatgc ctgaggccgt ggctgaagaa gtgtcttat 120
tcagcacgac ggacatggtt ctgtttctc tcatcgtggg ggtcctgacc tactggttca 180
tcttttagaaa gaagaaaagaa gagataccgg agttcagcaa gatccaaaca acggcccccac 240
ccgtcaaaga gagcagcttc gtggaaaaga tgaagaaaac ggaaangaac ttatc 295

<210> 348
<211> 230
<212> DNA
<213> Rattus norvegicus

<400> 348

tcagtgacag aacaggaact taaccttgg tgattctcat gggactacct ccatccacat 60
ctggttgtct ctgttaattt ctttgatag taaccttgc tctgttaattt gatcaagaat 120
ttttcatgaa aatgtgaact attgtgacaa cttaattgt agattggta tcagatgtt 180
tagatgcatt attctacact aaatgttaca tggaaaaaat gtgaataaac 230

<210> 349
<211> 282
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 349

cccggtctta tattaggcca acagcggccc tagccgaggc tgttcgtgaa gaagggcact 60
ggtcggttta gcgtcctccg ctcgngtgcc caccgcccgc tcgtcgagag cccgcgcagg 120
acccgggaca ctggcagac atggagactg tcgttcgcag atgcccattc ttatcccag 180
tccctcaggc ntntctgcag aaggcaggga aatctctgct gttctatgct caaaaactgcc 240
ccaagatgat ggaagtccgg gccaagccgg ctccctcggac cg 282

<210> 350
<211> 280
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 350

ccgaggcagt tcacccgagg ccgatctccg aggtctgccca gcggctactt cccacagcct 60
ccgccccatggg tctggagctt ctacctggac ctgatgtccc agcnntgccc tgccgtctac 120
atcttcgcca agaagaacgg catcccttc cagctgcgta ccatcgagct gcttaaaggt 180
cagcattaca ctgatgcctt tgcccaggtg nacccttga ggaaggtgcc ggctttgaag 240
gatggggact tgcgtcttggc agagagtgtg ccatcttgct 280

<210> 351
<211> 309
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 351

tcttagccaa catgatcagt gaacctcagaa tcagttacgg caacgatgct ctcatgcctt 60
ctttgactga nacgaagacc actgtggagc tccttcccgt gaatggcgaa ttcagcctgg 120
atgatctcca accgtggcat cctttgggg tggactctgt gccagccaat acagaaaatg 180
aagggtctgg gttgacaaac atcaagacag aagagatctc agaagtgaag atggatgcgg 240
agttcggaca tgattcangc ttcgaatccg ccatcaaaaa ctgggtggct tgcagaagng 300
tgggtcaaa 309

SO_3170 US

<210> 352
<211> 228
<212> DNA
<213> Rattus norvegicus

<400> 352

qctqqctqca aaatcttcga gagccgaccc aaactggctg cgtggcgtca ggggtggaa 60
gccgcagtgg gggagagcct cttccaggag gcccatgaag tcgtcctgaa ggccaaagat 120
atgcctccct tcatggaccc gaccttgaag gagaaaactga agctctctgt tcaatgcctg 180
ctgcactgag ggaacagcct gaagtcaagg gaaacttggt gtgtgcgt 228

<210> 353
<211> 298
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 353

caggatcatg gatacttagtg tccttctcct cttgctgtc ctccctagct tcttgctatt 60
cctggtcaga ggccatgcaa aagttcatgg tcatcttcca ccaggacccc gtcccttacc 120
cctcttggga aaccttgc agatggacag aggaggctt cgtaagtctt tcattcagct 180
tcaagaaaaa cacggagatg tgttcacagt atactttgga cctaggcctg tggtcatgct 240
gtgtggaca cagaccataa gggaggctt ggtggacatg ctgaggnttc tctggcgg 298

<210> 354
<211> 326
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 354

gacaaaatcc cagaataagg aaactctgaa ccaggagtca tggaagtcaa acccaagctc 60
tactacttcc aaggcagggg aaggatggag tcgatccgct ggctgctggc tacagctgga 120
gtggagtttg aagaagaatt tcttgagacg agagaacaat atgagaagtt gcaaaaggat 180
ggatgcctgc ttttggcca agtcccattg gtggaaatag acgggatgct actgacacag 240
accagagcca tcctcagcta cctggccgcc aagtacaact tgtatggaa ggacctgaan 300

SO_3170 US

gagagagtca ggattgacat gtatgc 326

<210> 355
<211> 274
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 355

tccttctct ccttgctgtc ctccctcagct tcttgctatt cctggtcaga ggccatgaa 60
aagttcatgg tcatcttcca ccaggacccc gtcccntacc cctcttggga aaacncttg 120
aagaatggac agaggaggot ttgtaagtct ttcattnagc ttcaagaaaa acacggagat 180
gtgttcacaa gtatacttgg aactaggcct gtggtcatgc tgtgtggac acagaccata 240
agggaggcgc tggtggacat gctgangctt ctct 274

<210> 356
<211> 148
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 356

cggccccact gcctcagaga cctacaggac cgcggnncgt gggtgatctg gtcggtaaccg 60
gagagcgcag gttgtatcac caacatgggg gactctcacg aagacaccag tgccaccatg 120
cctgaggccg tggctgaaga agtgtctc 148

<210> 357
<211> 302
<212> DNA
<213> Rattus norvegicus
<400> 357

ttagatctga ctgaaatgat tatccaattt gtaatatgtc cccagacca aagagaagcc 60
aagaccgcct tggcaaaaga caggacaaa aaccggtaact tgcctgcctt taaaagggtg 120
ttgaagagcc atggccaaga ctaccttgc ggtaacaggc tgaccgggt agacatccac 180
ctgctggaac ttctcctcta ttttgaagag tttgatgcac gccttctgac ctcttcct 240
ctgctgaagg cttcaagag cagaatcagc agcctccca atgtgaagaa gttcctgcag 300

SO_3170 US

cc

302

<210> 358
<211> 286
<212> DNA
<213> Rattus norvegicus

<400> 358

cggaagtgaa ccaaggcact gagcggcatc taatgcacct ggagttggac atctcagact 60
ccaagatcg gtatgaatct ggagatcacg tggctgtgta cccagccaat gactcagccc 120
tggtcaacca gattggggag atcctgggag ctgacctgga tgtcatcatg tctctaaaca 180
atctcgatga qqagtcaaac aagaagcatac cgttccccctg ccccaccacc taccgcacgg 240
ccctcaccta ctacctggac atcactaacc cgccacgcac caatgt 286

<210> 359
<211> 320
<212> DNA
<213> Rattus norvegicus

<400> 359

caagttcctg cagaacaagg ctttcctaac aggaccccat atctccgtgg ctgacttggt 60
ggccatcaca gaactgatgc atcctgtcag tgctggctgc aaaatcttcg agagccgacc 120
caaactggct gcgtggcgtc aggggtggaa gccgcagttt gggagagcct cttccaggag 180
gcccatgaag tcgtcctgaa ggccaaagat atgcctccct tggatggaccc gaccttgaag 240
gagaaaactga agtctctgtt caatgctgct gcatgagggaa acagcctgaa gtcaaggaa 300
acttgtgtgt gcgtgtgtgt 320

<210> 360
<211> 288
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 360

tngcctctgt ccaccgaggc agttcaccccg aggccgatct ccgaggtctg ccagcggcta 60
cttcccacag cctccgcccgggtctggag ntctacctgg actgatgtcc cagccctgcc 120
gtgccgtcta catttcgcn aagaagaacg gcatcccttc cagctgcgtta ccatcgagct 180

SO_3170 US

gcttaaaggc cagcattaca tcatgcnttg cncagggtgaa ctttgcggaa aggtgccggc 240
nttgaagcng gagattcgac ttgccaanna tgtggcancn tgctgtat 288

<210> 361
<211> 272
<212> DNA
<213> Rattus norvegicus

<400> 361

gaactctgct caacagcctc tttctctagt tcctgcagac aaaatcccag aataaggaaa 60
ctctgaacca ggagtcatgg aagtcaaacc caagctctac tactttcaag gcaggggaag 120
gatggagtcg atccgctggc tgctggctac agctggagtg gagttgaag aagaatttct 180
tgagacgaga gaacaatatg agaagttgca aaaggatgga tgcctgctt ttggccaagt 240
cccatggtg gaaatagacg ggatgctact ga 272

<210> 362
<211> 286
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 362

ggcccatgga gcacacccag gctgtggact atgttaagaa gctgatgacc aaggcccgct 60
actcactaga tgtgtggagt aggagctacc accctccac ccctcgctcc ctgtaatcac 120
ctaacttctg ccgacctcca cctctggtgg ttcctgcctg gcctggacac agggaggccc 180
agggactgac tcctggcctg agtntgtccc tcctgggccc ctaagcagag tccggccat 240
tgtatcaggc ageccagccc caaggcacat ggcaagaggg attgac 286

<210> 363
<211> 288
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 363

gtaaaagang ccttgattga tcatggggag gagtttgctg aaagaggaag cttcccagta 60
gctgaaaaaaaaa ttaataaaaga ctttggaaatt gtttttagcc atggaaatag atggaaagaa 120

SO_3170 US

ataagacgct taccctcact actctgcgga atttggcat ggganaagg aacattgagg 180
ntcggttca anaggcaanc ccgnancct nggggaggac ctgngaaan ccatgggcn 240
caccgtgnna ccccanagtnt atccctggc tgngcncctt gnannacc 288

<210> 364
<211> 237
<212> DNA
<213> Rattus norvegicus

<400> 364

tcacagctaa agtccagggaa gagattgatc gtgtggttgg caaacatcg agcccttgca 60
tgcaggacag gagccgcattg ccctacacag atgccatgtat tcattgaggc cagaggttca 120
ttgacctcat tcctaccaac ctgcccacatg cggtgaccctg tgacattaag ttcaggaact 180
acctaataacc caagggaaaca acaataataa catcaactctc atcagtgctg catgaca 237

<210> 365
<211> 304
<212> DNA
<213> Rattus norvegicus

<400> 365

ggagaatgga gcccatccgg tggctcctgg ctgcagctgg agtagagttt gaagaacaat 60
ttctgaaaac tcgggatgac ctggccaggc taaggaatga tggagtttg atgttccagc 120
aagtgcacat ggtggagatt gatggatga agctggtgca gaccagagcc attctcaact 180
acattgccac caaatacaac ctctatggaa aggacatgaa ggagagagcc ctcatcgaca 240
tgtatgcaga aggagtggcg gatctggatg aaatagttct ccattaccct tacattcccc 300
ctgg 304

<210> 366
<211> 218
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 366

ggcactggtc ggttagcgt cctccgctcg agtgcacc acc gncgtctcg acgagagccc 60

SO_3170 US

gcgcaggacc cggcgacact ntgcagacnt ggagactgtc gtttcgcaga tgcccattct 120
tatcccgagt ccctcaggcn tttctgcaga aggcaggaa atctctgctg ttctatgctc 180
aaaactgccc caagatgatg gaatcgggc naanccgg 218

<210> 367
<211> 269
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 367

ggtcnccatg gatctggta ctttcttggt acttactctc tcctctctca ttctcctctc 60
actctggaga nagnnccgct aggagaagga agctcnctcc tggccccact cctctccna 120
ttatcgtaa ttccctccn gatacatgtg aagaacatca gccaatccta accaagttt 180
caaaaaccta tggccctgtg ttcactctgt atttgggctc acagccnct gtcataattgc 240
atggatntga agcnataaag gagctctgt 269

<210> 368
<211> 270
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 368

gagaccgcca gttccgtctc tactcttttg tgaggactgc agccaacacc gctgacaatg 60
cagatctttg tgaaaacctt aactggtaag accatcaccc tggaggtcga gcccagtgac 120
accattgaaa atgtcaaggc aaagatccag gacaaggagg gcatcccccc tgaccagcag 180
aggctgatct ttgcaggcaa gcagctggaa gatggccgca ccctgttcag actacaacat 240
ccagaaggag tccaccntgc acctggcct 270

<210> 369
<211> 238
<212> DNA
<213> Rattus norvegicus

<400> 369

ggaagcaatg attcttaggtg tgtttctggg gcttttcta acatgtctgc ttctccttc 60

SO_3170 US

actgtggaag cagaattttc agagaagaaa ctttcctcct ggccccacac ctttcctat 120
cattggaaat attcttcaga tagatcttaa ggacatcagc aaatctctga ggaattttc 180
aaaagtctat ggccctgtgt tcaccctgta ctttggcagg aagcctgctg tggtgtta 238

<210> 370
<211> 260
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 370

aaaggaccag ttctgtattt gtggtagta ggctacgttg tcatggggc ctctggcaac 60
ccaggtacct gaaaaccagt ttcagggaca gcagtggaga acatactcta ggcaaacata 120
ctggcctgtt tccattataa caagataacct aaggccaact actttnttta ccaagagaag 180
agtttgtta cagcacaaga tgaggtggcc ccgtcgtag cccttggagg gccatgtgga 240
aaataaacacg tggtgaggga 260

<210> 371
<211> 283
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 371

cgcgcgtccc ttaccccggt ggctgcggcg atgcgtacga tgagctggat ggctcggtc 60
atgtagaagc gaccgtccnc gcccacaacc agcgtggcct cctgcctcaa cgccggctcc 120
acggtgaga cgatgcttg gatgaaatttcc tccgcatagt tagcgttgcc ctgaaacacc 180
tncaactcgct tccgcaaccc gctggtgccc ggcttctgat ccggntatgc ctgcgtctc 240
actgtcacga tottcaccat ggtggccggg gctgcgnngc gac 283

<210> 372
<211> 273
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 372

aaaaagttca tgcctatcgt ttacactncc acngngngtc ntgcatgnca gcaatacagt 60

SO_3170 US

tggcattccg gaagccaaga ngcctttta tcagnatcca cganaaaggg natattgctt 120
cagttctgaa cgcattggcca gaagatgttgc tnanngctat tgtggact gatggatag 180
nggatcctnc ggntngggcg acctttgttn tannggggtg ggcattncctg ggggtaaag 240
ggtcctgna aacaggttng ggggtngat ccc 273

<210> 373
<211> 301
<212> DNA
<213> Rattus norvegicus

<400> 373

tacggaagta gttcccgctg cttatgccat ggtcctggaa ctgtacctgg atctgctg 60
gcagccctgt ccgcgttatt tataatctcg ccaagaagaa caatatcccg ttccagatgc 120
atactgttga gctgcgcaag ggtgagcacc tcagcgatgc ctttgcccag gtgaacccca 180
tgaagaaggt accagccatg aaggatggtg gttcacctt gtgtgagagt gtggccatcc 240
tgctctacct ggccgcacaag tataaggttc ctgaccactg gtaccccaa gacctgcagg 300
c 301

<210> 374
<211> 309
<212> DNA
<213> Rattus norvegicus

<400> 374

gggtctccat ggatctggtc actttctgg tacttactct ctcctcttc attctctct 60
cactctggag acagagctct aggagaagga agtccctcc tggccccact cctctcccaa 120
ttatttgtaa tttcctccag atagatgtga agaacatcag ccaatcctta accaagttt 180
caaaaaccta tggccctgtg ttcactctgt atttgggctc acagcccaact gtcatttgc 240
atggatatga agcaataaaag gaagctctga ttgataacgg ggagaagttt tctggtagag 300
gaagctatc 309

<210> 375
<211> 298
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 375

gtacccacat gtcacagcta aagtccagga agagattgac cgttgattg gcagacatcg 60
cagcccctgc atgcaggata gaaaacacat gccctacaca gatgccatga ttcatgaggt 120
acagagattc attaactttg tcccgaccaa cctgccccat gcagtgacct gtgacattaa 180
attcaggaac tacctcatcc cgaaggaaca aaagtgttaa catcaactgac atcagtgctg 240
catgacagca aggagttccc naaccagag atgtttgacc ctggccactt tctagatg 298

<210> 376
<211> 234
<212> DNA
<213> *Rattus norvegicus*

<400> 376

cagacatcgc agcccctgca tgcaggatag aaaacacatg ccctacacag atgccatgat 60
tcatgaggga acaaaaagtgt taacatcaact gacatcagtg ctgcatgaca gcaaggagtt 120
cccccaaccca gagatgtttg accctggcca ctttctagat gagaatggaa actttaagaa 180
aagtgactac ttttgcctt tctcagcagg aaaacgagct tgtgttggag aggg 234

<210> 377
<211> 267
<212> DNA
<213> *Rattus norvegicus*

<400> 377

gtcctgacca ggctacgatc tggtacggcg gatgtctatt gtctatgcac taggcgcctg 60
gtcggtgctg ggctcgccga tttccttac acgaaaacccg aagatgtcag actatgggaa 120
aatgaagag gatgactcaa gcaatgaaat gccttttct acaagtgaag actctgattt 180
agcgatggaa agggctgagc ctattaaagg gttttatacg aagacaattg taaagtattc 240
agaaaattct gttccattac tcagagg 267

<210> 378
<211> 249
<212> DNA
<213> *Rattus norvegicus*

SO_3170 US

<223> unsure at all n locations
<400> 378

aatccggnag aggatccacc tgagacctga ggncgcctta ttcttctttg tcaacaacac 60
tatccctccc accagtgcta ccatggaca gctgtatgag gacaaccatg aggaagacta 120
ttttctgtat gtggcctaca gtgatgaaag tgtctacggg aaatgaggca gaagcccagc 180
agatgggagc gcctggactt ggggtaggg gaggggtgcg tgtggactt gggaaaccag 240
agggagggc 249

<210> 379
<211> 292
<212> DNA
<213> Rattus norvegicus

<400> 379

gaagggagct cagcacgttc agccctgcaa gggcagtgac acaaaattga gagtaaagct 60
cgaagagaga ctgtttaaa gaaaacggca atggatttga tcccaaactt ttccatggaa 120
acctggctgc tcctggttat cagcctggtg ctctctacc tatatggaac tcattcacat 180
ggaattttta aaaagttggg aattcctggg cccaaacctt tgcctttctt ggggacgatt 240
ctgcttacag gaagggctct ggaaattgac aaatactgcc ataaaaaata tg 292

<210> 380
<211> 168
<212> DNA
<213> Rattus norvegicus

<400> 380

ctagccccgtt tggagttatt ttatccctg accacgatt tacaaaactt taagctgaaa 60
tctgtacttc acccaaagga tatcgataca actccagtt tcaatggatt tgcctctctg 120
ccaccatttt atgagctgtg ctccattcct ctctaaagag atcaaatt 168

<210> 381
<211> 298
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 381

SO_3170 US

accagttctt ggttccactc gcagagaagc agagaagcg agnaagcggc gcgttccaga 60
acctncgggc aagaccagcc tctcccagag catccccacc gcgaaggcan accttctcca 120
gagcataccc cagcggagcg nacccttccc cagagcatcc ccgcgcgcaa ggcacacctt 180
ccagaagcag agagcggcga catggccaag aaaacagcga tcggcatcga cctgggcacc 240
acctaactcgt gggtggcgt gttccagcac ggcaagggtgg agatcatcgc caacgacc 298

<210> 382

<211> 297

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 382

ananaataga agaacaccag gaatcattgg atgttacaaa ccctcgtgat tttgttgatt 60
attacacctgat taaacaaaaa caggcaaaca acatcgaaca atcagaatat tcacatgaaa 120
atctgacatg cagtatcatg gatctcattg gtgcagggac agagacaatg agcacaacat 180
tgagatatgc tctcctgctt ctgatgaagt acccacatgt cacagctaaa gtccaggaag 240
agattgaccg tgtgattggc agacatcgca gcccctgcat gcaggataga aaacaca 297

<210> 383

<211> 234

<212> DNA

<213> Rattus norvegicus

<400> 383

aacgcagccg actctgcagc attgccatgt caggaatgat attggaaatc tttgctgtgc 60
tccttgggg cgccatcatt agtgaagccc tcgggtggcc ctttgtctt tatactttg 120
gaagtattgg tgtggtctgc tgccttctct ggctcattct ggtttatgat gaccctgtct 180
ctcaccatg gataagtgc ccagaaaagg agtataattt atcctccctg gacc 234

<210> 384

<211> 299

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 384

SO_3170 US

agctgccatc ttgcgtcccc gcgtgtgtgc gccttatctc agctggtctg cccgagacnc 60
tctgagcgtg aaccttagtc ccccgcgcgg ccccatttcc actccgacaa gatgaaagaa 120
acgatcatga accaggaaaaa actcgccaaa ctgcaggcac aagtgcgcac tggtggaaaa 180
ggaactgctc gtagaaagaa gaagggttgtt cacagaacag ccacagcaga cgataaaaaa 240
ctgcagttct ccttaaagaa gtttagggta aacaatatct ctgtattgaa gaggtgaac 299

<210> 385
<211> 291
<212> DNA
<213> Rattus norvegicus

<400> 385

ctgacgttgt ctatagaaca gtggccaacc tttctggatg tgaggcagg 60
ctctggtgaa ctgtctacga ggcaagagcg aggaagagat tatgtctatt aacaaggcct 120
tcaggatcat ctctggcata gtggatggta tcttccttcc cagacatccc aaggagctgt 180
tggcctctgc tgactttcac cccattccca gcattattgg tgtcaacaat gatgagtgatg 240
gctggatcat tccctcgagc atgaccacca ctgactccaa gaagaaaatg g 291

<210> 386
<211> 304
<212> DNA
<213> Rattus norvegicus

<400> 386

actgagtgga cctgtgaaga atccaaattc caaacaattt tcaacatgga ttcccgtgaa 60
ttccggagaa gagggaaagga gatggtggat tatatacgat actatctgga cggcatttag 120
ggacgtccag tgtaccctga cgtggaggct ggctaccttc gggccctgat ccccaacct 180
gccccccagg agccagaaac atatgaggac ataatcagag acattgaaaa gataatcatg 240
ccagggtcac acactggcac agcccctact tcttcgctta cttccccagg ccagctccata 300
ccca 304

<210> 387
<211> 264
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 387

gngcggagga agccgactgt tccggatctc tgcatacgac ggcacaacct ttgctccana 60
gatcatggct gccgaggatg tggtggcgac tggngncgac cccagcgagc tggagggcgg 120
cgggctgctt caanagatnt tcacgnccn tctcaacctg ctgctccttg gccatgcac 180
ttcctgctct acaagatcga tcgcngggac cagcccggtg ccaatgggaa caacnactcc 240
gacgagnnng cnccgctgnc ncng 264

<210> 388
<211> 267
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 388

cggAACAGTC gaggctagat tgacacagct gtccgttcag accccagcac catgcccatt 60
acactgggtt actggganat ccgtggggct agcgcatgcc atccgcctgc tcctggaata 120
cacagactcg agctatgagg agaagagata caccatggaa gacgctcccg actttgacag 180
aagccagtgg ctgaatgaga agttcaaact gggcctggac ttccccaaatc tgccctactt 240
aattgatgga tcacacaaga cacccag 267

<210> 389
<211> 307
<212> DNA
<213> Rattus norvegicus

<400> 389

gtgccctcac gcagcttaat gtggcctttt cccgggagca ggcccacaag gtctatgtcc 60
agcaccttct gaagagagac aggaaacacc tgtggaaagct gatccacgag ggcggtgccc 120
acatctatgt gtgcggggat gctgaaata tggccaaaga tgtgaaaac acattctatg 180
acattgtggc tgagttcggg cccatggagc acacccaggg tggactat gttaagaagc 240
tcatgaccaa gggccgctac tcactagatg tgtggagcta ggagcttacc aacctccac 300
ccctcg 307

<210> 390

SO_3170 US

<211> 248
<212> DNA
<213> Rattus norvegicus

<400> 390

tcttgagaa ggcattgcc 60
ctactcagt tccagccctg 120
attagccaaa gtagccccag 180
cagtcagccg actcaacttct 240
tggagacc 248

<210> 391
<211> 283
<212> DNA
<213> Rattus norvegicus

<400> 391

atggtttgg accctgtcat 60
tttgtaaaca cattgagg 120
ccagttccac ttctgtatgt 180
cagagagg 240
actttgcatt ctgggatcag 283

<210> 392
<211> 290
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 392

ggactatctc ccctaagt 60
cgagaactct tcatgtgttg 120
gcaattgctg ccatgccgg 180
gagccatcc ggtggctcct 240
actcggatg acctggccag 290

SO_3170 US

<210> 393
<211> 281
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 393

ttgcactacc ctgcaaggot gtgttgcagg gcccggaaagg ctcactgttc cgaaatggcc 60
gagcagtcag acaaggatgt gaagtactac actctggang gagattcaga agcacaaaga 120
cagcaagagc acctgggtga tcctacatca taagtgtacg atctgaccaa gtttctcgaa 180
gagcatcctg gtgggaaaga agtcctaaga gagcaagctg ggggtgtatgc tactgagaac 240
ttgaggacgt ccgggcactc taacggatgc acgagaactg t 281

<210> 394
<211> 287
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 394

ccgctgctta tgccatggc ctggaactgt acctggatct gctgtcgag ccctgtcg 60
ctatttatat ctteggcaag aagaacaata tcccnntcca gatgcatact gtggagctgc 120
gcaagggtga gcacctcagc gatgcttgc ccagtgaacc ccatgaagaa ggtaccagcc 180
atgaaggatg gtggcttcac cttgtgtgag agtgtggcca tcctgctcta cctggcgac 240
aagtataagg ttcctgacca ctggtaaaaa caagactgca ggccccgt 287

<210> 395
<211> 293
<212> DNA
<213> Rattus norvegicus

<400> 395

aagagaatcg cattaaagag aaagaaaagc aaagaatgga ctttcttcag ctgatgataa 60
actcccagaa ttccaaagtc aaagactctc ataaagcatt atccgatgtg gagattgtgg 120
cccagtcagt tatcttcatt tttgccggct atgagaccac tagcagtgtc ctttccttg 180
ttttgtatcc gctggccatt cacccgtata tacagaagaa actgcaggat gaaattgtatg 240
cagctctccc caataaggca catgccaccc atgataaccct gctacaaatg gag 293

SO_3170 US

<210> 396
<211> 266
<212> DNA
<213> Rattus norvegicus

<400> 396

gttggcctcc caataagttag ggtcaacatt tagtcaaaat atgcgattgt tgcaaagctt 60
tcgaaggctg gctttgtggg tacagtgtat ccatagatgc ctgaattaac tgaagatctt 120
aactgcagat tctacacatt tctcatcctc taatggcttc ctctggctgc ccagggctga 180
agaaaacttct tcactgtggg gaggttgctg actctggttc tccagggcct cagcagaggg 240
aagttggcca aagcgtgggg tccact 266

<210> 397
<211> 259
<212> DNA
<213> Rattus norvegicus

<400> 397

gtcaaatggc tacccaaaaa cgatctgctt ggtcatccaa aggctcgccc gttcatcaca 60
caactccggtt cccatggtat ttatgaagga atatgcaatg gggttccaaat ggtgatgatg 120
cccttgtttg gtgatcagat ggacaacgcc aagcgcatgg aaactcgggg agctgggtg 180
accctgaatg tcctggaaat gactgccat gatttggaaa acgccttaa aactgtcatc 240
aataacaaga gttacaagg 259

<210> 398
<211> 252
<212> DNA
<213> Rattus norvegicus

<400> 398

gaaaactttaa gaaaagtgac tacttttgc ctttctcagc aggaaaacga gcttgtgttg 60
gagagggcct ggccccatg cagttgttgc tattcttgc aaccattttt cagaacttta 120
acctgaaatc tctggttcac ccaaaggaca ttgatacgt gccagttctg aatggtttg 180
cctctctgcc acccacttac cagctctgct tcattccttc ctgaatagat caggcattt 240
ggctctactg tg 252

SO_3170 US

<210> 399
<211> 272
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 399

gngagccaat ggcnctcttc attttctgg ggatttggcn ttcttnnntt gttttcnnntt 60
ttctatngaa tcagcaccat gtcagangga agctcccacc ngtcccact cctctaccaa 120
ttttggcaa tattttgcaa ntgggtgtta aaaatatcag caaatctatg tgcatgcnag 180
cgaaagagta cgggcctggn tcaccatgta tctgggcattg aagcccaactg tggtgctgta 240
tggatatgaa gtattgaaaag aagctctgat tg 272

<210> 400
<211> 294
<212> DNA
<213> Rattus norvegicus

<400> 400

catccgtggg ctggctcact ccattcgccct gttcctggag tatacagaca caagctatga 60
ggacaagaag tacagcatgg gggatgctcc cgactatgac agaagccagt ggctgagtga 120
gaagttcaaa ctgggcctgg acttccccaa tctgcctac ttaattgatg ggtcacacaa 180
gatcacccag agcaatgcca tcctgcgcta cttggccgg aagcacaacc tttgtgggaa 240
gacagaggag gagaggattc gtgtggacgt tttggagaac caggctatgg acac 294

<210> 401
<211> 276
<212> DNA
<213> Rattus norvegicus

<400> 401

gctgcgagca ggtctgaccc attgctctct ctgctcagag ttccccaggt ctgaagtctg 60
cctgaaagat gtcagccctc aaagctgtct tccagtagat tgacgaaaac caggaccgct 120
tttgtcaagaa acttgcagaa tgggtggcca tccagagcgt gtccgcgtgg ccggagaaga 180
gaggagagat cagaaggatg acggaagcgg cagtgcagat gtccagaggc tggggggatc 240

SO_3170 US

tgtggagctg gtggatatcg ggaaggcagaa gctccc 276

<210> 402
<211> 271
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 402

ctgacctgac ccatgatgta agggncgta ggggagcatc accactgcaa aggctgacta 60
aggncgttn ggctaaaggt cncttgaag cccagtgtct anagtcacac cttcttgct 120
ctggccccag gaggcctact tcttctttt ctcngngaat cctggaatct taaagataaa 180
agaacctaga aagaaaatca aaccacttt cttgtgggg cagatggtaa tatggactg 240
agaacagcaa acctggggtc ttggagagga g 271

<210> 403
<211> 253
<212> DNA
<213> Rattus norvegicus

<400> 403

cgcactgctc cttagggcaag agccttcacc tcttctacag ccaacaccat gcgcgagatc 60
gtgcacatcc aggccggcca atgcggcaac cagatcggcg ctaaggcaac aaatatgtac 120
ctcggccat cctagtggac ctggagccag gcaccatgga ctcagtgagg tcgggaccat 180
tcggccagat cttcaggcca gacaacttg tgttcggtca gagtggtgca ggaaataact 240
gggcaaaggg cca 253

<210> 404
<211> 312
<212> DNA
<213> Rattus norvegicus

<400> 404

cagctggctt cctacataca gttctgtgaa agagatcaga gagtgaaaga aagatggcgg 60
gggattcaag ccgctggct gcagtctccc ttctctctgc ctgtcagcaa agttatttg 120
ctttgcaagt cggacgagta agataaaaat acaagatcgc acctccagca gtcacggct 180
ctctggagtt tgagagaata ttccgcgcac agcaaaaactc tttggagttt tattccgtat 240

SO_3170 US

tcatcatatc gctgtggatg gctggatggt atttcaatca agttttgca acctgtctgg 300
gtctccctgta ca 312

<210> 405
<211> 245
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 405

ctgccggtcg cttcctgagc ctccctctggc tctgtgtctc tgtccctcagc ttccacgtcc 60
tcgccccacn gcgcacatgga gggttaccat aagccagatc agcagaagct ccaggcccctg 120
aaggacacag ccaatcgccct gcgcacatcagc atccanncca ggccaccacc gcggcaggcg 180
nggacaccccc acatcttgna gtagcgcngn cgagagcng gtcgnnctgn tattnnnnac 240
caggc 245

<210> 406
<211> 299
<212> DNA
<213> Rattus norvegicus

<400> 406

tcatacccaa ggaaacagca gtactaacat cacttacatc agtgcgtcat gacagtaagg 60
aattccccaa cccagagatg tttgacccag gtcactttct agatgagaat ggaaacttta 120
agaaaagtga ctacttcatg ctttctcag cagaaaaacg gaaatgtgtg ggagagggcc 180
ttgccagtat ggagctgttt ttgttcctga ccaccattt acagaatttc aaactgaaat 240
ctctgtctga tccaaaggac atcgatataa actcaatacg ttctgagttt tcatcaatc 299

<210> 407
<211> 290
<212> DNA
<213> Rattus norvegicus

<400> 407

ggaaggggaa gaatgccagt ttttggaaag gctactaaag gactggcat tagttttagc 60
cgtggaaatg tatggagagc cacaagacat ttcacagtca ataccctgag gagtttggc 120

SO_3170 US

atggggaaac ggaccattga gatcaaagtg caagaggaag cagagtggct agtgatggaa 180
ctgaagaaaa ccaaaggctc accctgtat cccaaattca tcataaggatg tgctccctgc 240
aatgtcatct gtcattat cttccagaat cgtttcgatt ataaagataa 290

<210> 408
<211> 221
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 408

catcagttct gtgttcaaag ttaacatcg agataatggg ctcctgnct cncntccnt 60
ttttgnntngc tngggcantg gnaaccnnga agnccnntgg aganttccan aaaagaaaaaa 120
attttaggggc acaaaatgtga gaaaaancnt cacaanctn gggnanannc cccctgntgc 180
gcctnttgtg gggctgccct atgtccaatc cagctatatt g 231

<210> 409
<211> 116
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 409

atttttagat ggaacgattt gaagtcttgg gtgtcccctt cagtcctcaa ctgggaca 60
ctgctggtaa ggagaggttc aagtgcattcg cttccacaca acatangagn gnnatt 116

<210> 410
<211> 275
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 410

cacagccccct accagcnac cctccataac tgcaccaaga ggatctatcc aacacccc 60
tgagcaggag gagcctgaag actccaagg aaagagtctt gaggaaccct ttccctgtca 120
gctggatcta accacaaacc cacagggta cacactggat gtctccctcc tctacctgga 180
gcctgaggaa aagaaaactgg tggtcctgcc tttccctggg aaggaacagc gctccctga 240
gtgccccgggg cccgaaaagc aaagaacccc ctgat 275

SO_3170 US

<210> 411
<211> 300
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 411

cccttcaa ttcctacgc ttccctctgt ccatgcttcc catgggncc tcatcgatcc 60
tccaggccag tgtttctgtg gaccggctgg agaggtattt gggaggagac gatttagaca 120
catctgccat tcgcccgcgtc agcaattttg ataaagctgt gaagtttca gaggcctt 180
ttacttggc ccggacttgg aagccacaat ccaagatgtg aacctggaca taaagccagg 240
ccaatggtgg ctgtggtggg cactgttagct ctgggaaatc ctcttggta tcagccatgt 300

<210> 412
<211> 286
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 412

cnagaagtta gtggaggtact tgaaggcagag ttctgttatg ctgtgtttct ggatccttt 60
gatgtgtgtg ggctaactgg tgccaaagtac tttctctccc gtcagtggtc ttccagcaggg 120
ggatattttg tcactatctt gaagaangct cccagtgccc cagtccttct tcataatgtcc 180
ccagaggtat ctggaaactc acagatacca tgactttcaa ggaaagagtg tggaaacttct 240
ttcctaattgg gggagcatgc attctgtccc agttttcaa aactgc 286

<210> 413
<211> 272
<212> DNA
<213> Rattus norvegicus

<400> 413

agagaagcct gctgagaaaa cactggaaag ctttacctca ggcactaagt tgaagaaaa 60
acgacaatgg ccacaatggt agaactgagc ctttacaatgtt agcagtgtga gtttgcctta 120
ggctgtccag tgaataagaa gaccctcccc cggaaagtcc cgagttatg ttccatgcgc 180
tattcaatag ctttcatgc acatatctgc aacttcacat tgatagcaca gaattccatc 240

SO_3170 US

ataagcatca ccatggtagc catggtaaac aa 272

<210> 414
<211> 103
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 414

agctccgggg gaggtcgccc acatcattca ggntgaaagc tgcagtgtt gctgtggccc 60

tggtcttcct gacagggttgc caagcttggg agttctggca gca 103

<210> 415
<211> 273
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 415

aacgcctta aaactgtcat caataacaag agttacaagg agaacatcat ggcgcctctcc 60

agccttcaca aggaccgtcc tatcgacgcct ctggaccttgg ctgtgttctg ggtggagttac 120

gtgatgagggc acaaggnggc gccacacactg cgccccgccc cccacgaccc cacctggcac 180

cagtaccact ccttggacgt gattggcttt ctcttggcca tcgtgttgc ggtggtcttc 240

attgtctata aaagttgtgc ctatggctgc cgg 273

<210> 416
<211> 106
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 416

gaagannnac ctggacaccc agactgttgg agancntccg gggatgtcg ctcacatcct 60

tcaggatgaa anctgcagtg gtggctgnag gnncgtgtct ncctga 106

<210> 417
<211> 294
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 417

cactaaagca aaggcagacaa ctccagctct ccacacagct ggtctctgac accttgggg 60
acacaagggc cctagctatg gagtgcgat tccacagaca cctatggta ccttggatac 120
tgccaaaact cttaaataca tggactttt cctcagaaac ttgtcttcag atatcctgtt 180
aatcttcagt ttttgtttgt ttttgggggg nggaggaagg cctctctcta tgttagctatg 240
gctgtcctag aatcactctg tagatcaggc tggcctcaga ctcatgcctc tgct 294

<210> 418
<211> 262
<212> DNA
<213> Rattus norvegicus

<400> 418

cgaggcttcc aggttagcggg cggtcgcaat ctgtcccagg gtacgacccg gccttggca 60
cagattcgcg gacccggggc tgcctcttta agggaggggg tggagccacg agtgaggatc 120
gaaaagctcc agaaaacttg aggccagagc cccgcaccag ggtgcagcca tgagtgcgga 180
ggtaaggtg acagggcaga accaggagca atttctgctc cttgccaagt cggctaaggg 240
ggcagcactg gccacactca tc 262

<210> 419
<211> 145
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 419

acacaaagcn atttanantg ccagactata cttggttaa aggaataacct tttcatgnct 60
ctgggattca aaagncaatt tnccaaaatg tnnggnaana attttgtgn cnanccccga 120
nttcatntga ncggcttanc ccagt 145

<210> 420
<211> 271
<212> DNA
<213> Rattus norvegicus

<400> 420

SO_3170 US

ctccaacctg gtgcgccacc agcggtcgca caccggggaa aagccgtatg tctgcagcca 60
gtgtggcaag gccttcatct ggagctctgt gtcatcgaa caccagcgca ttcacacagg 120
cgagaagccc tacaagtgtg aagactgcgg caaggccttc cgaggacggt cgcatatttt 180
ccggcactta cggaccacaca cgggcgagaa gcccttctcc tgtggctct gtggcaaagc 240
gtttggccag agctctcagc tcatccagca c 271

<210> 421
<211> 282
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 421

cagttagaag ttccctgggna ggcctgtgt agacccagcc tagctgagta ctgattcatt 60
ttgatgttag tgggaagaat gggggagatt cgccagcttg tcctcatcac tggtgctctg 120
attctgggca aggagagctg ggtcctcgga gatgagaact gttgcagga gcaggtgagg 180
ctcagggctc aggtgcgcaca gcttgagacc cgggtcaaac aacaacgggt ggtgattgca 240
cagctcttgc acgagaagga ggtccagttc ctggatagag ga 282

<210> 422
<211> 222
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 422

ctgaagacca acttgtcctc agtgagcgac tgtgtgcagc aggtggtgga gcttctgcaa 60
gancagagca ttgttccccca caccaccatc aaaggcatcc atgaactctt tgtgccggaa 120
aacaaaattt atcaaatccg agctgagttt gagactctcc catcaactacc aattaccaag 180
ctggatctgc agtgggtgca gattctgagc gaaggctggg cc 222

<210> 423
<211> 275
<212> DNA
<213> Rattus norvegicus

<400> 423

SO_3170 US

gagaaaaggcc accaccttagc taggtgaggt gtgccagcat ggtcctgggg gtctcaactgt 60
ccccagccct gggacgctgg ttccgccatg caatccctt cgctatcttc acgctgttac 120
ttctttatat cagtgtatgg ctcttccatg agtggccctt tgagttgcca gctcaaagaa 180
ctcagcagtc cggcctgtgg gaactcaagc tctcttctcc ttctccagcc ctcacctctc 240
tgcttcctgt cacctcaggt gttttacaag gctga 275

<210> 424
<211> 279
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 424

attcctcatt gcatgatgcc ttcaaataaa gggcaacgtg aatacagttt ataaatcaac 60
gagtatttta agccttgttt aaaacatctt tttactccan nnnnnnnnnn nnnnnnnnnn 120
nncaaactaa atcattgttag ctaacctgta atatacgtag tagttgacct ggaaaagttg 180
taaaaatatn gctttaaccg acacgtaaat atttcagata aacattatat tctttgtata 240
taaaanaaaag aaaannangn caatggnnga atnaactct 279

<210> 425
<211> 288
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 425

gtgttcgcag gttcccagca ctcttgcga aggactcttg tccttctcta ccagagcagc 60
atangagggta atggctgccc tgtctccacc taccagatgt caggcatcggtgacgttga 120
agatgtggct gtgaccttca cagatgacga gtggaagcgt ctggcacca tgcagagagc 180
actctacaag accgtgatgc tggagaacta tgagagcatc atctctctgg ggcttcccgt 240
tcctcgacct gatgtgattc ttcaagttcaa gagaaggggc gaatcctg 288

<210> 426
<211> 286
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 426

gtctgggctg gagctaaagg acacacagna gcaagtccac agatccgtga tgagtcccac 60
gggggcaggg ctganggccca ccatcttctg catcctgacc tgggtcagcc tgacagctgg 120
ggaccgcgta tacatccacc ctttcatct cctctactac agcaaganca nctgcgccc 180
gctggagaac cccagtgtgg agacgctccc agagccaacc tttgagcctg tgcccatattca 240
ggccaagacc tccccgtgg atgagaagac cctgcgagat aagtcg 286

<210> 427
<211> 235
<212> DNA
<213> Rattus norvegicus

<400> 427
gaggattcac tcacatttc ttcccgctgg ccatgagtga gctgccctt ctgagtccag 60
agggagccag agggcctcac aacaacagag ggtctcagag ctccctggag gaaggctcag 120
ttacaggctc agaggctcgg cacagcttag gtgtcctgaa tgtgtccttc agcgtcagaa 180
ccgtgtcggg ccctgggtgga acatcaaatac atgccagcag aagtgggaca ggaaa 235

<210> 428
<211> 249
<212> DNA
<213> Rattus norvegicus

<400> 428
ccctggttct ggaagtggag atcgtgagtc atggctgctc cccgagacgc agagatccac 60
aaggacgttc agaactacta tggaatgta ctgaagacat ctgcagacct ccagactaat 120
gcttgtgtca ccccagccaa gggggccct gagtacatcc ggaaaagtct gcagaatgta 180
catgaagaag ttatttccag gtattatggc tgccgtctgg tggtgccctga gcatctggaa 240
aactgccccg 249

<210> 429
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 429

SO_3170 US

ctgaacttga ccaaagggag actcagggttg gaaacaaaat cccagggatg atacacggaa 60
aaactccatt aggcacagtg acatacatgt gtaattcaaa cgctgcactt gagagactga 120
ggcaggagga gatctatcga aaggttgaga ccaactagct gtaggctagc ctgggctatg 180
ctgttaagac cttgtcacaa agtacaagaa gggagaataa aagaatattt cct 233

<210> 430
<211> 287
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 430

tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttgttgt tttgttatgt 60
gtgcacatct atgtttcat atctaccgtt tgggtatgcc tttgtccctg ggttagggact 120
ggctctctgg acaagtagat gtcctgttag cctgcagaca tcacatgact ctcaagaacg 180
aatcgtgtat cctggtccct gtcctgtgc atgcacattc ccctcctctg tcccgggca 240
gaggcaaggg tgtgtgaggc ctatggcag aggccatatt gtgaaga 287

<210> 431
<211> 183
<212> DNA
<213> Rattus norvegicus

<400> 431

ctaaaattaa gatagagtga atgagacaga tatctgtaga cactgtattt tcttgtgtga 60
tcagatctag tgtggtggat gatagaagtt gaacttgctt tattgtatg tgttaaaata 120
ttttgtttgc attaaatggc ctattgaaat gctttctgt tcctataata aaataacctg 180
atg 183

<210> 432
<211> 287
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 432

tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttgttgt tttgttatgt 60

SO_3170 US

gtgcacatct atgtttcat atctaccggt tgggtatgcc tttgtccctg ggttagggact 120
ggctctctgg acaagtagat gtcctgttag cctgcagaca tcacatgact ctcaagaacg 180
aatcgtgtat cctggtccct gtcctgtgc atgcacattc ccctcctctg tcccgaggca 240
gaggcaaggg tgtgtgaggc ctatggcag aggccatatt gtgaaga 287

<210> 433
<211> 283
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 433

ctgggntcan cacgttntgc tgagnannng gctgntgtgt acccccagag atccctnctg 60
ttggaccttc accagtccng gggnggctgg gactcccaca cctcaagccc gagctatgac 120
ttacattcca ctgctggag aagagaggcg gggcccagag tatcctgccc ttgggagtca 180
aagaccctag gngccaggct ggcacagggta tggggaggct ggncctttat aaatatnata 240
tgcaganna aagannaaaa naaggcggc cnccgacaag nna 283

<210> 434
<211> 295
<212> DNA
<213> Rattus norvegicus
<400> 434

aagatcgaa gaatcacagg gctggaccct gcaggaccta tgtttgagg aacttcccc 60
aacgagcgcc tttctccaga tcatgcctt tttgtggatg ctattcatac ctttaccagg 120
gagcacatgg gtctgagtgt gggcatcaaa cagcccatgg cccactatga cttctacccc 180
aacgggggct cttccagcc tggctgccac ttcctggagc tctacaaaca cattgcagag 240
catgggctta aatgccataa cccagaccat caaatgtgcc catgagcggtt ctgtg 295

<210> 435
<211> 133
<212> DNA
<213> Rattus norvegicus
<400> 435

SO_3170 US

ccctgattct tttgctgtat agccctggat gtgtaatgca gacattatct aactgtgtgt 60
ggtaaccttg acatcacaga actgctagtg aacgaggtaa aaataataaa ggtacaacca 120
gtgcacatcgca aaa 133

<210> 436

<211> 212

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 436

accaccagg ttcaagctgg ccggctttgt cttaggtcga tggtaagac aacggcatct 60
tcaccagccg acaggaacgt gcagggagag tctggttcta gggccaactt gtgggatgct 120
cccttgagct gggccacacg cttgggttcc ttgcagcact gtgtacang ctttcctgc 180
gactcggacc tgcccatccc ggcacacata gc 212

<210> 437

<211> 291

<212> DNA

<213> Rattus norvegicus

<400> 437

ttaataacg taatgacgcfg gtcctttcc taatccctaa aaacctgtct cataaagtgt 60
aatgggggag cagccctttt ggtgttgcaa aatgaagttc caggcttcta aaatgttgcc 120
atgtattgaa aggagctaat gccattgtaa atgttattag tttcacattt cttgagcagc 180
ctagagtaca gggtaacat ttgttagatct tgtaatgatg tattgtgctg tggaagtact 240
gtgtgtgaat agcagtagtg gggcaaaaag caatcttgc attgaatgt a 291

<210> 438

<211> 262

<212> DNA

<213> Rattus norvegicus

<400> 438

ggataaatga gacggctcgg gtcgagtgca tttgcagggg actcgggttt ggttcccagc 60
gtccacgttg ggcagcacac aagtgtccgt aactctagct ctatggatc tgaccattt 120
ctggcccttt cagcacctgc acaaatgtgg cagacacata tacgcttaag taaaaataat 180

SO_3170 US

taaaaaaaaaac gaatctttaa aacatTTTTT aaaagaagtg atggagtgaa ttccctgcctt 240
atggcctgct ggaaatggaa ca 262

<210> 439
<211> 272
<212> DNA
<213> Rattus norvegicus

<400> 439

tgggcttctt tcactggac acttggaca ccgctgagtt actaacagct ttgtttacac 60
agtaggaaga ggggcataga gagctgtgcc tctatggta gcctctggga ctgaagttg 120
ccacgactag tggttggaca cctgggaggc tggctaccctt cctgtcttac tccctgaagg 180
acagggttga atctctgggt tccagtcctt agggagatgg agtactgtct gtcagctgct 240
ggctgtgctt tttgaagagg ccaaattgtt tc 272

<210> 440
<211> 284
<212> DNA
<213> Rattus norvegicus

<400> 440

acagaaccca acctgctact aatcacggag aagaatgtgg aggacaagaa taaggctaga 60
agccagagca agtgaggact gagcaaggga agggagaacc gattgccatc ggcccttcatg 120
ctctggtag ggtgaggttg gggccaagag gactggcctt ggcagatctt caagtcattg 180
ggaagatgga gataccactg taggggtgaa caccggaga cctaggagat cccctcccc 240
ccctttctct tggcctccga ttcactcctg tcccgttccc tgac 284

<210> 441
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 441

ctgaacttga ccaaaggag actcagggtt gaaacaaaat cccagggatg atacacggaa 60
aaactccatt aggcacagtg acatacatgt gtaattcaa cgctgcactt gagagactga 120
ggcaggagga gatctatcga aagttgaga ccaactagct gtaggctagc ctgggctatg 180

SO_3170 US

ctgttaagac cttgtcacaa agtacaagaa gggagaataa aagaatattt cct 233

<210> 442
<211> 273
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 442

accgactgat gttcccacgg atgctaata agctggtag cctccggact ttgagcagcg 60
tccattcaga gcaagtgttt gcncatcgcc tgcaggacaa aaaacttccc cctctgctct 120
ccgagatctg ggatgtccac gaatgactgt ttctccgtgt cctengtggtt ggcaaggcag 180
ctgaagttac nganngcttc nnngaagngg nanannctgg ggagagaaaa nnntncagggg 240
gnccgagggaaa agagacnctt nttnnngnaan aag 273

<210> 443
<211> 264
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 443

gnaagaagga aggttctctc ttcacctgct tctatttact tgccagcaca tctgttggga 60
tctactaacc ttgtgagatg gagcaactac tagatccttg gacttccac tcatacgctga 120
tcattgttag ggggttggac tacagactgt aaatcatcat aacaaactcc cttaactgtat 180
agaggctatc cataagttct gtgactctag agaaccctga ctactacaga ccctgtttca 240
aaaaagaagc aaaagttagc tggg 264

<210> 444
<211> 283
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 444

gaggaatcca attttctgag ctccacaagc cactctgcan nnntcagatag tcaccagggt 60
cactacagga ggaattgttc catctgagag acccagcatg cattataactc gctgtctgct 120

SO_3170 US

gcttctcctg gctggactct tggaaactctc tcacagtcag ccagaccaag aagagcctga 180
caataacaacc aacccaaacct acagttgttc tcacagcaga acatctccag ctaccagatt 240
gcctctggna atgccaacct tgcctccgc ctctaccacc tga 283

<210> 445
<211> 290
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 445

gaaattcaat ttgggtttc aaaattgatt cttaaaganan atataccccc ataaggaaat 60
aatatcacaa ttcataagg natggggaaat acagacnagg tacnntttca ggcacattca 120
gtgtaaatat atgttagtcat ttatactgnn atattaaata atattatatt tgtgaagaca 180
gagatttatg tcttacaatg taaatganaa acagacaaac ctaatcagat atctggctgg 240
tgaagccatt ggtcagtgtt aggaatttcc agtcaggaga agaccctcta 290

<210> 446
<211> 165
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 446

ggggaaacac attcaaagaa gaatcaggaa gagggatgtg atagggtgct tatggatggg 60
aaaccgagaa agganataac atttgaatg taaatgaaaa atatccaatt aaaaaaaaaa 120
aancaaacc tgcccagant tttgccngng ngacaaaaan agaga 165

<210> 447
<211> 173
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 447

gggagggngcc ctttttccca ccaccagaag agtttgttt catccatgct gtacctgtg 60
aggaacgtgt gcggactgca gtcctccca agaccataga ggagtgtgag gtgattctga 120
tggtggact tcctggatct ggaaagaccc agtgggcact gaaatatgca aaa 173

SO_3170 US

<210> 448
<211> 189
<212> DNA
<213> Rattus norvegicus

<400> 448

gttattaagg ataaaactgtt taatcaaatt aacgttgctt agttactgct gagtactctt 60
cctcagagct ggcgtgcggg aggagaagaa gctcaaggaa cattctaacc cagttaccag 120
aactcagata gaagactaag gtgctgtgtg acgtcctgag tattagcaact gtaataaaac 180
tgtcacatg 189

<210> 449
<211> 165
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 449

gtattncc agancaganc gtgtattgaa acataaacgt atgtgccatg aaaatcacga 60
caaaaaacta nnncngatgtn ccattcaaann gtggccttct gtacatcana ggnagattct 120
ggctttctac ggcaccagaa gntgttcac tggcnanaan aaant 165

<210> 450
<211> 184
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 450

cngggggaca attaaaggga ctgtgcgtac gtttctctca tgaatgaagg aagctgtctg 60
aacaaagaat tactgattca gctacgcagc agaacatatg tgctctactc tttcaagatt 120
aataatcttg ctttatgtca tattgtatat ttaatcttag tctgttgcnng gggagggct 180
atgc 184

<210> 451
<211> 271
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 451

tgcaaaaaaa cttccggggg cattctgttt ccagnccact tcgggctatg tagtcccttc 60
ttctgtgctg aggccctggcc cacgtcacaa gcatttcctt ccagacccac aacccagg 120
gactgggaca aaclyyyyc a gyatgatttg ccacttgctt ggcccgctga tccccagcccg 180
atacctctcc tctctactct cccaggagac tctcaggccc agtgtgaccc tggggcttgg 240
ctgagaagct gacccagccc cagggccagc a 271

<210> 452
<211> 103
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 452

caaggagaag cagataaaga agcaaacggc tnctcgctga gctggtaaaa cancaagccc 60
aaggcccaca gaagattcag ctgaagacgg tgatgggtga tct 103

<210> 453
<211> 284
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 453

gccacagtcc cagcgganc c acagccgct cccgccttct ccgtgtcgaa cgatccccag 60
tctgtccccca aaatgcctgt ggacttcaac gggtaactgga agatgctgag caacgagaat 120
ttcgaggagt acctgcgtgc gctcgatgtc aacgtggcct tgcgaaaaat cgccaacttg 180
ctgaagccgg acaaagagat cgtcaggat ggccgaccaca tgatcatccg cacgctgagc 240
acttttcgaa actatatcat ggacttccaa gttggaaagg agtt 284

<210> 454
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 454

SO_3170 US

ttctgcataa gggcttcca aattaagtct gtccagtaga gtgatttgct ttattattac 60
caagaataca acagcttagtg aaccgttagca gcatgcgaag aggggctgta actatcacca 120
tacatgcact gtcccgtgga ggtgtgacac gggagacgtg tggatcatgt gatcattgtg 180
aacaccttgt gagctttaaa ataaagtcca ccctgtggtg tcaaaaaana aaaaananan 240
nannaggagn nannannncn ggattangga ccncccc 277

<210> 455
<211> 155
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 455

gaatggaacc catgaggaat gccaccaaag gctgcaacga gtctgttagat gaggtccaca 60
nggccatgta gctgccagga ctgctctgcc gtctgcngtc ccaaacccca tccccaccaa 120
tccctgacac actaataaaag gctttgtgac ctcaa 155

<210> 456
<211> 277
<212> DNA
<213> Rattus norvegicus

<400> 456

ggggattagc tctatctgac accttctgta tcttcattct aaagtgggt catgctttta 60
ggggtgtgtgt ggccgggtgcc atggaagtgg taatgcattgt gttgatgcag ggattatgca 120
agctgaaact ttttctcagg ggccatgtca gatgtgtgag aatacctgga ctcctggttt 180
tcctccatag taaaggggtg ttctccact ctctacaagt ctcttcatgc cagagggttt 240
tcaagactcc cattttagtgg ccaggaggat ttcattg 277

<210> 457
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 457

cgangatctt gagactggtg tttctgtggc cactggtgga caggatgtat gtacgtcg 60

SO_3170 US

cgtgtgtgta agtgtgggtg tgtgtgcgtg ctctgctcat ctctaggaa cttcgaggtg 120
ggaagtggga ggtgggaggt ggagggaccc agtagtgaga agaactagga ggtgaggcct 180
aatgggccgc agattggtca tgtttggtg ctgatgacag aggggccagt cccaggggag 240
gaggctngc gggccnactt tnttgctcc tgtcgna 277

<210> 458
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 458

cctcattgaa catggctcca atgaattcac tatgttctga agacatgcaa gatttcatgc 60
caaatatata ttcaagtgcta aaaaaacaaa atccctgtgtt cagtttagaa tgttttgatg 120
tagctgagaa gccttgccca acaacaataa ctgaagctac tgttagttcat aaagttcaca 180
tggcttata gccttgcaa aacatatcta taaatcaatt acttttgaa aat 233

<210> 459
<211> 294
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 459

gttccgcgga ggcggaagct cggggtgagt ccgaactaaa ccttgcgttc aagattcgcc 60
gtcacccgta atccaccgccc ctggccgagg aaggcatagc tgctggaggt gtaatggacg 120
tcaacactgc tctacaagag gtgctgaaga cgcgcctcat ccacgatggc ctagcacgtg 180
gcatacgcga agtgccaaag ctttagacaa ggcgcacccatctctgcg tgcttgatc 240
caatgtgatg agcccatgta tgtcaagctg gtgnnggcct ttttnccgaa caaa 294

<210> 460
<211> 300
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 460

atctggccat aatttaattc catctctagg ttttctgtct tattgtttca gaggcacatc 60

SO_3170 US

gagaaccaac catgggcagc tttactaagg aagagttgac tgccatatcc tcgatgaagg 120
nttcactgct aaggacattc tggaccaaaa aatcaatgaa gttctcctct gatgataagg 180
atgctttcta tggcgac ctcggagacg ttctaaagaa gcatctgagg tggctgaaag 240
tcttccccgt gtactccctt ctagctgtca gtgtatgaca gcgagccata gtgagcacct 300

<210> 461
<211> 121
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 461

cngctccgct cgctctcgaa cctcnngtctt cagctcactg ccttcactcc agacttcacc 60
atgtccgtca gggtgacnca gaaatcctan aagangtcca cctcnngtcc ccgggacttc 120
a 121

<210> 462
<211> 133
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 462

cggggatccg agttgcagac nacgtgnngt cncangagcc acctcnnggag tttgaaccan 60
gaccctata actccnnnnag gctgtcctca gcttgngnac agcctnagcc actccaaant 120
tngatcaaac gtt 133

<210> 463
<211> 281
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 463

cnggcggcgg acgacgttcg tcatttggtg cgggaggggng cggaganggg tgcgtcgagc 60
ctccggtgta ccaaactaga ggtgagcatg gcagaacagg aaccactgc tgagcagctc 120
gctcagatag ctggagagaa tgaggaagac gagcactctg tgaactacaa gcctccagcc 180

SO_3170 US

cagaagagca tccaggagat ccaggaactg gacaaggatg atgaaagcct tcgaaagtac 240
aaggngggccc tgctgggccg agtagctgtc tctgcagacc c 281

<210> 464
<211> 264
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 464

gctccgggng cnctgcgcgc cgnggngttc tgtgncttgc ngtctgttc cctccgattg 60
tgccctancaa tgaccaccca gcagantgtt ctccagggcc cgggaccncng gggtttccga 120
ntcggtggcg gcaaggactt tgagcaacct ctgcattt cccgggtcac tcccgggagc 180
aaggntgnta tagctaactt atgcatacga gatttnatca cagccattga tgggnagat 240
accancagta tgacaaatnn gaag 264

<210> 465
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 465

gcttctaggg aggctctctg caataggtgc ccggcccagc tttttttca aaatgtctac 60
tgtccacgaa atcctgtgca acnctcagct tggagggtga tcattctaca cccccaaagtg 120
ccnatgggtc ggtcaaaaccc tacaccaact tcgacgntga gagggatgct ttgaacattg 180
aaacagcaat caagaccaaa ggcgtggacg aggtcaccat tgtcaacatt ctgactaacc 240
gcagcaatgc acagaggcag gacattgcct tcgccta 277

<210> 466
<211> 249
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 466

tgggatcccc aggggctaat gggcatcctg ttcttgacgc agggactgt gagaaagtct 60
ctcaccgtga ccaagttct ctgagtgcc agccaaccca ggctcaccag ctccctcnag 120

SO_3170 US

ctaccgcncg tccatcaggta caactgccaa ccccaggctg aanaccaaac ccagctatga 180
gctcctggag gcatgactcc ctcagggcca gcagctccga tccctccag tagtgatcat 240
gggcnaggg 249

<210> 467
<211> 253
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 467

tacacgcgcg cgttgncc gccgcctatgt ccctagtatgt ccccgagaag tttagcaca 60
tcctgcgagt actccaacac caacatcgat gggcgccgaa aaatagcctt cgctatcact 120
gccattaagg ttctggccaa cggtagac aacaagctgc gtgaggacct ggagcggctg 180
aagaaaaatcc gagccatag agggctgcgc cactttggg gcctcgtgt ccggggtcag 240
cacaccaaga cat 253

<210> 468
<211> 301
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 468

gctttctatg ttgcggaccc cggagacgtt ctaaagaagc atctgaggtg gctganagta 60
cttccccgtg ttactccctt ctatgtgtc aagtgtatg acagcagagc catagtgagc 120
accctggctg ccattggac aggattgtat tgtgcaagca agactgaaat acagttggtg 180
caggggcttg ggggcctcc agagaggatt atctatgcaa atccttgtaa gcnagtgtct 240
cagatcaagt atgctgccag taatggagtc cagatgtatc ctggacag tgaaatttag 300
t 301

<210> 469
<211> 136
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations

SO_3170 US

<400> 469

ttccggcgga ggccgctctt tcttttctc cgcagggtgc gcggtggcag ccgctgcgg 60
gcttggctcc ctaagctatc cgggccatc cttgtcgntg cggcgacact cgcaacatct 120
gcagccatga ccgagc 136

<210> 470

<211> 147

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 470

attaaggaaa atggaggtct ggactcagag gaagtcttat cccnatgaag caaaaggatg 60
gatcnntgta aatacagagc tgagtatgnc tngtggctaa acgancacag ggtntgtggt 120
atcccctcng caaagagtna ncgccttc 147

<210> 471

<211> 294

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 471

gctaccagga cagctcatca tgtggggaga aatgttgggc gctgctatag gaggagttgt 60
ggctgtncgc agctgcaccc gnccgtcctg tctgccgtgg gcttcactgg gtcaggcatt 120
ggcagctgca tccccatagcg ggncaagatg atgtctgctg cagcagttgc caacggggc 180
ggagtcgnncn caggaagcct tggtagccan actacagtcc antangtgta tttggnnntn 240
tccaacatna ancaacnate catcttgggg tcttttgng naanccatna gagt 294

<210> 472

<211> 300

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 472

attccagcga gagacagagg gagtgagcgg gcgggttggaa agagccagt gtgcagagcc 60
ccactccggg ctccctagga aggcaagctct ggagtgagaa gggcttgcc tccaggctg 120

SO_3170 US

ctgcctcctc gacccaatcc tcccgtgac ccaacatcaag cggtcgcaac cctcgccgcc 180
tctggaaac tttgccatt gcaacgggca gacacttcctc actggaactt acaatctgcg 240
agccaggaca ggatccccag ggcgcaggan ggaattttgt ctattggac agtgttctct 300

<210> 473
<211> 276
<212> DNA
<213> Rattus norvegicus

<400> 473

gtccctcagc agtcctggat tcagaatgga accatcaaag acaacatcct gtttgggtcc 60
gaatacaatg aaaagaagta ccagcaagtt ctcaaagcat gcgcctcct cccagacttg 120
gaaatattgc ctggaggaga catggctgag atcggagaga agggataaa tctcagtgg 180
ggtcagaagc agcgagtcag cctggccaga gctgcctatc aagatgctga catctatatt 240
ctggacgatc ccctgtcggc tgtggatgct catgtg 276

<210> 474
<211> 155
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 474

aacagctctc tgacacctga gagggatcag ccagagtaag agtcgtggc ttgattgtaa 60
catcagaata gcctaagagt gaagcaanca ctctgccatt acttggant cttctgcctc 120
ccgtgtgaga ggatgtgtcg gagaggttca ccagc 155

<210> 475
<211> 282
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 475

gggnccgctt ggtggcctcn attgagatnc ngaggatcna aggactgtgt anctacaatg 60
ttgtcaagac tttccgtat gtatggnctc tttgnggtgt ctcatncnng ggaggttaatt 120
gtgggaacgg tgacacttac tatctgtatg atgnccatga acatgttcac cggcaacaac 180

SO_3170 US

aagatctgtg gttggaaatta tgagtccccn nnatttgaag angacgtgct gancagcgcac 240
atcatcancc tcagganaan ccggtnatcg ccatccgtac at 282

<210> 476
<211> 225
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 476

ggcggctcgg actgagcagg gcttccttg ccagtggatt gtgttagatg tacagccagt 60
ctcttgtctt ctgtccaaca tggcatcttc tgatattcag gtgaaatgct tccggccagg 120
ctttgagtga tccagcctcg atcaaaagaa ttgtcccag tccctttcc cccaaagaga 180
ggncttcctg agaatcagag aatagantga agaaaganct agaca 225

<210> 477
<211> 296
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 477

aggacaccga gattgagatc tcgcacnctt cactggtaga aaggaaatc aataaagccc 60
agaacttgat ngctgggaa gggttgaaga ttagctctga tctcattagc ttggaggtta 120
gctctccaca tgtcccagac ctnactctga ttgaccttcc tggatcaca agagtggctg 180
tgggtgacca gcctgcagac atcgaacaca agatcaagan acttatcact gaatacatcc 240
agaaacagga gaccatcaac ctgggtgtgg tccccagcaa tgtggcattg ccacca 296

<210> 478
<211> 294
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 478

gacagcactc tgcatggctt agagagcagc tccccctctt ccccaactgac agccagtgcg 60
cagttcacct ctgtgggctg cggagcacct ctgccgcagc ccagacatct tccctgagca 120

SO_3170 US

gaggcagaac aagcataggc gcttcagaa taccctagcc gtcctccgga agtctggttt 180
gntgggaatc actctgaaag ccaaggagtt gattcgtcag aaccaagcaa ctnaggtgna 240
actggaccag ctgaaggagc aaaccagatg ttnatagagg ccaccaagac aggg 294

<210> 479
<211> 281
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 479

aaatcctgac aaaagaatct aatgttcagg aggttcgtatg tccagtcact gtgtgtggag 60
atgtgcattgg gcaatttcat gacctcatgg aactcttag aattggtggt aaatcacaga 120
tacaaattac ttgttatgg gagactatgt ggacagagga tattactcgat ttgaaacagt 180
tacactgctt gtagctctta aggttcgtta ccgagagcgt atcaccatac tccganggaa 240
tcacgagagc agacagatca cacaagttta tggttctac g 281

<210> 480
<211> 293
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 480

ggcggagcag tcactgtttg angagctctg agcnctggca gctgcacact tcagttcacc 60
aacccaggag ctttctctct gnggaagggg tgganatagc tgttaaaga cactgcaacc 120
agaaagccaa gcattctgtc actaagcagg anactgaggcccacttgga agaagaaata 180
aaagatggtt cttagcacag aggaaaacag gagtggtttagt ttagtcaact tacccagtgt 240
cccactgccc gatggagagg ctggcgttagg ggagaacaac gggattcctt gna 293

<210> 481
<211> 298
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 481

ctccagctag ctcagtctca cagcctaagc ccttaaagcg tttcaaacga gctacaggg 60

SO_3170 US

agaaagggcc cccgacccgt caggggtctg gtgcagagtc tgaagnccctg tatgactttg 120
tttttattgt ggctggtgag aaataggatg gtgaagagat ggagattggg gaagtagctt 180
gcgggaactc tggatngatc aatncccagc tngtttgggg gttccnagcc anaagaggca 240
nncccagnng attcgnnaat ttgnncacnc ctggagctgt cnacaattcc tcttccnc 298

<210> 482
<211> 65
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 482

ggtgangtga agctgctaaa ccccatttt gctgctgctg tggagatgct gtgcttttag 60
agttna 65

<210> 483
<211> 270
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 483

ggccggccgt gagggngcgct ggagctgccc gtactggttt tggatttagga atggtttct 60
ccctcacctt cttaagaga agaaagtggc cattagccctt tggttctggc gtgggactgg 120
ggatggccta ctccaactgt cagcatgact ttcaggctcc atatcttcta catggaaaat 180
atgtcaaaga gcagtgactt atgctangaa catcccagcg ggagaaaaga gaagcctcgt 240
ttattcctca ggaatactga agtgcctgg 270

<210> 484
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 484

ggaaagctac ctatccgta gacagctccc cctgcaccta cggctgccat gacttccgca 60
ctgacccaag ggctggaacg aatcccagac cagcttggct acctgggtct gagcgaaggt 120

SO_3170 US

gcagtgctag cgtcatctgg ggatctttag aacgatgagc aggccatctna 180
gagctggtca gcacagcctg tggcttccgg ctgcaccatg gcacgaacat cccttcaag 240
cgccctgtctg tggctttgg tgaacacacg ctgctgg 277

<210> 485
<211> 279
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 485

caatgactca cagcgacagg gccactaagg atgctggcca gatatctggg ctaaatgtgc 60
tccgagtgat caacgagcct acagctgcag ctctggctta cggtctggac aaatccgaag 120
acaaagtcat tgctgtataat gathtagtg gaggaacctt tgacatttct atcctggaaa 180
ttcagaaaagg agtgtttnan gtgaaatcca ccaatgggga cacttctta ggaggtgaag 240
actttgacca agctttgtta cggcacattg tcaaggagt 279

<210> 486
<211> 204
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 486

ggggttacnn ctgcagtcn gtccgctgtt tgcaaataatt gcgtgggctc ngcgcgtgc 60
gggctgcggg anggtccgga cccggcgtcc gattgcagcg ccatccagtt tgcatgaaac 120
tttcacctgc gtcggggga acagttctg ctccgactcc tgatcggtca cctccctgtt 180
ttcccgacag cggggactgt cttt 204

<210> 487
<211> 290
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 487

gccgcccccc tcggacgctt ggnactgtcg cgtctgtgtc gcctgtcgcc catcgctgc 60
cgccgctgcc acccaccagc aaccatgagc gcccggggcc ccgggtgtagt ctgctgtcct 120

SO_3170 US

ctagattagt gctctcctcc gcgacggtcc gcagcatgga gtcgcccgc gccagccgc 180
cggccagctt gcctcagacc aaaggaaaaat ccaaaaggaa aagggattta cgaatatcct 240
gtgtgtccaa gccacccgtg tccaacccca caccccccgg aaactggact 290

<210> 488
<211> 166
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 488

gacagccata catgacacca agccattggc tctgagttt ccttgtcca gtcggctta 60
cgtctgtgtc caggtcggtc tggctgtcca tcagctctcg tcatngggag agtcagctc 120
ccggaggttt tggttgatgg gcgcttggca ggtngctgtt ggggaa 166

<210> 489
<211> 262
<212> DNA
<213> Rattus norvegicus

<400> 489

gtggaagaaa gaacacagca agaatggaaa actttgcacc tggcttcag gttggagatg 60
gaatttggaaat ggatttaaaa ctatccaacc acgttttaa tgcttaaaa caacatgcct 120
actcggaaga acgtcgaagt gcccgtctcc atgagaagaa ggaacattcc accgctgaaa 180
aagcagttga tcctaagaca cgcttactta tgtataaaaat ggtcaactct ggaatgttgg 240
agacaatcac tggctgtatt ag 262

<210> 490
<211> 25
<212> DNA
<213> Rattus norvegicus

<400> 490

ctctcctcct cattcaacac cttcg 25

<210> 491
<211> 21
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 491

ctgaaggcctc taaaagtctac a

21

<210> 492

<211> 22

<212> DNA

<213> Rattus norvegicus

<400> 492

ctctgtctgc catccctccc ac

22

<210> 493

<211> 27

<212> DNA

<213> Rattus norvegicus

<400> 493

ctcacacctag atcctttgtg tgtctgg

27

<210> 494

<211> 25

<212> DNA

<213> Rattus norvegicus

<400> 494

tccgatcata cctagtagtt tgagc

25

<210> 495

<211> 25

<212> DNA

<213> Rattus norvegicus

<400> 495

ctttcatttg ctgctggtag tgctc

25

<210> 496

<211> 26

<212> DNA

<213> Rattus norvegicus

<400> 496

SO_3170 US

cctactgtgg atgataccag tgctgc 26

<210> 497
<211> 25
<212> DNA
<213> Rattus norvegicus

<400> 497

tgcgccatcct ctggcgaaaa gtagg 25

<210> 498
<211> 24
<212> DNA
<213> Rattus norvegicus

<400> 498

tcccttctca tgctgttgtg gctc 24

<210> 499
<211> 27
<212> DNA
<213> Rattus norvegicus

<400> 499

ctctcctgct tctgatgaag tacccac 27

<210> 500
<211> 23
<212> DNA
<213> Rattus norvegicus

<400> 500

cctctcactg ctcttcacat ggc 23

<210> 501
<211> 27
<212> DNA
<213> Rattus norvegicus

<400> 501

cactattctt gtcaaatggc tacccca 27

<210> 502

SO_3170 US

<211> 24
<212> DNA
<213> Rattus norvegicus

<400> 502

ccttgtaaat gccagataac gcca

24

<210> 503
<211> 22
<212> DNA
<213> Rattus norvegicus

<400> 503

ctcccacatag gcgggaaatt gc

22

<210> 504
<211> 25
<212> DNA
<213> Rattus norvegicus

<400> 504

cctcatagat gccattttgtt ccacc

25

<210> 505
<211> 24
<212> DNA
<213> Rattus norvegicus

<400> 505

catcctccca ttcattatcg ccgc

24

<210> 506
<211> 22
<212> DNA
<213> Rattus norvegicus

<400> 506

cacgtccctc attgctttc ag

22

<210> 507
<211> 25
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<213> Rattus norvegicus

SO_3170 US

<400> 507

ccgatccctg tcctccccac cgtgc 25

<210> 508

<211> 24

<212> DNA

<213> Rattus norvegicus

<400> 508

ccaagactga tcgctgtctc cagg 24

<210> 509

<211> 25

<212> DNA

<213> Rattus norvegicus

<400> 509

ctgccctact taattgatgg atcgc 25

<210> 510

<211> 29

<212> DNA

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